

Open Spending EU

COALITION

How Open is Public Procurement Data in the EU?

2023



Open Spending EU Coalition is a collaboration of civic activists, journalists and professionals working to ensure that government spending is fair, open and efficient and creates the best outcomes for Europe. We are working at the national and EU levels to advance openness in EU funds spending, procurement, and company ownership. More information: www.open-spending.eu.

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Summary

Public procurement counts for [14% of the EU's GDP](#). Businesses, especially SMEs, seek lower barriers to participation, governments need more efficiency, and citizens want the best services, works, and goods for their tax money. Access to procurement information is mission-critical for all of these aspirations.

Yet public procurement data across the EU remains patchy and inaccessible. It is not yet possible to establish a coherent picture of what most governments are buying, when, from whom and for how much

One of the most powerful moves the European Commission can make to address this problem is to mandate harmonised procurement data publication across the EU by including public procurement in the list of *High-Value Datasets* under the [Open Data Directive](#). The European Parliament encouraged the Commission to do that in [its recent Resolution](#) on E-Government (para 35).

This study looks at how much public procurement data, below the [EU publication thresholds](#), was available across all EU countries in 2022 with the goal of informing policy considerations for amending the Open Data Directive.

It finds that:

- Data availability varies very widely with some countries like Luxembourg only publishing three fields of data in their [national portal](#) to others like Austria publishing 19 fields of data
- Some key fields for analysis and understanding of procurement like award values and contract implementation information are not routinely disclosed by Member States
- Just 60% of EU countries publish some procurement information as open data
- Less information is machine readable than is published on national portals. For instance, in the case of Hungary, while it has 19 out of 21 fields in its system, the information is not available for download in open formats (CSV, JSON, XLM) and has to be scraped from the procurement portal, which limits access to users
- Only around 20% of countries publish some information about contract implementation, although still in very limited amounts

- Completeness of information varies widely. On average, data availability is over 85% for fields related to the tender title, buyer name, award dates, supplier names and CPV codes. In comparison, for countries that publish fields related to contract implementation, the average coverage is very low (4%), meaning this information is only available for a few procedures.

The Member States and the European Commission can improve the situation immediately:

- Countries should implement the [new procurement eForms](#) in their entirety (as much as possible) for harmonised data collection purposes and strengthen transparency regulations for spending data below the national and EU publication thresholds
- The European Commission should include public procurement in the list of *High-Value Datasets* under the Open Data Directive
- We provide a recommended list of data fields to be published in Table 2 that would significantly improve the quality, completeness and usability of European procurement information for policy goals such as encouraging entrepreneurship, SMEs and innovation.

Introduction

Public procurement counts for 14% of the EU's GDP. Businesses, especially SMEs, seek lower barriers to participation, governments need more efficiency, and citizens want the best services, works, and goods for their tax money. Access to procurement information is key to all of them.

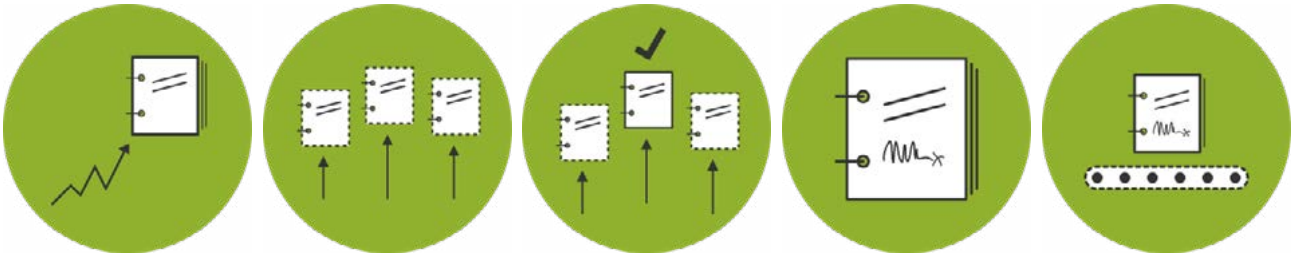
The lack of consistent regulations to guarantee transparency and openness in spending below the so-called EU and national publication thresholds – estimated to account [for around 50% of government spending on goods and services](#) – creates economic hurdles and market distortions. This includes strategic manipulation of tenders just below thresholds, decreases in market competitiveness and poorer value for money. [Evidence](#) shows that procurement is associated with better outcomes, such as lower levels of corruption where EU regulations apply (above threshold) or a 5–22% increase in bidders.

The evidence also shows that publishing full and comprehensive procurement datasets above and below national thresholds will generate revenues and spur other impacts. An analysis [by academics at Yale, Chicago Booth and MIT Sloan](#) found that the publication of procurement data on the EU's Open Data Portal in CSV format had major social benefits, including increased competition and supplier diversification.

It also leads to savings that could add up to billions of Euros given the size of the EU's procurement market, especially if contract management is further improved. Even a small shift of 1% in efficiency can save the EU around EUR 20 billion annually. An [EU Horizon 2020-funded analysis by EU academics](#) found that if EU Member States published five more items of information about tendering opportunities, savings are estimated to be between EUR 3–5 billion annually.

Standardised open data that links all different stages of procurement, from planning to implementation, can enable smarter contract management, red-flagging, efficiency monitoring, auditing capabilities, and even quicker transactions. More external monitoring of procurement can reduce levels of corruption and inefficiency. An [OLAF study](#) shows that direct public loss in public contracts in the EU amounted to 18% of the overall project budgets, of which 13% can be attributed to corruption.

The power of joined up procurement data



Planning	Tender	Award	Contract	Implementation
<i>INCLUDING:</i>				
<ul style="list-style-type: none"> Budgets Project plans Procurement plans Market studies Public hearing info 	<ul style="list-style-type: none"> Tender notices Specifications Line items Values Enquiries 	<ul style="list-style-type: none"> Details of award Bidder information Bid evaluation Values 	<ul style="list-style-type: none"> Final details Signed contract Amendments Values 	<ul style="list-style-type: none"> Payments Progress updates Location Extensions Amendments Completion or termination info
<i>ENABLING:</i>				
<ul style="list-style-type: none"> Strategic planning Market research Setting priorities Access to market 	<ul style="list-style-type: none"> Competitive tendering Cross-border procurement Red flag analysis Transparent feedback mechanisms 	<ul style="list-style-type: none"> Efficient supplier management Efficient complaints mechanism Links to beneficial ownership data Red flag analysis Trade / cross border analysis 	<ul style="list-style-type: none"> Cost analysis Understanding what government buys Trade / cross border procurement analysis 	<ul style="list-style-type: none"> Results based contracting Implementation monitoring Transparent contract management Red flag analysis
<i>EU RELEVANCE</i>				
<p>Better strategic planning by governments and easier access to planning information for businesses can improve access to markets and supplier diversification, especially for SMEs.</p>	<p>Easier access to tendering information can improve competition, reducing sole-sourcing, thus, prices. It can also fuel red-flagging analysis, as recommended by the EC. Also, easier opportunities for discovery can help SMEs reduce their procurement research costs and encourage them to participate.</p>	<p>Awarding and bidding information allows seeing the complete picture about who participates and who wins contracts, fueling trade and cross-border procurement analysis as well as supplier evaluation and management, contributing to better procurement management.</p>	<p>Contract analysis can help see what is ultimately purchased for what prices. It can help governments to bring their procurement prices closer to market prices and businesses to understand the competitive environment in the Union better.</p>	<p>Information about contract implementation can show the most meaningful picture of the effectiveness and efficiency of procurement. Was procurement really green? Was it socially responsible or innovative? Were the results adequate for the money spent?</p>

More and better procurement can also generate significant socio-economic benefits and innovative services. Better data and procurement can boost jobs and growth, fight climate change and spark innovation by creating an enabling environment. Publication of reliable, structured and high-quality data will enable better analytics and evidence-based policymaking, contributing to the prosperity of the Single Market vision. Moreover, better data on cross-border procurement trends can help the European Commission take informed actions and policy interventions to stimulate cross-border activity, equally benefitting European companies, citizens, and buyers.

Public procurement information is critical when combined with other datasets, such as company data. Standardised, open procurement data will add value to other datasets already listed as *High-Value Datasets* in Article 14 of Directive 2019/1024. Linked open data can help connect multiple datasets, including budgets, payments and beneficial ownership.

Finally, making open procurement data a high-value dataset supports the [EU Procurement Strategy](#), which focuses on promoting competition and access to markets and improving data, as well as the EU's [Single Market Strategy](#) of improving transparency and accountability of public spending, including that of regional development assistance. The European Parliament encouraged the Commission to include Public Procurement in the list of *High-Value Datasets* under the Open Data Directive in [its recent Resolution](#) on E-Government (para 35).

This study looks at how much open public procurement data – below the EU publication thresholds – was available across all EU countries in 2022 with the goal of informing policy considerations for including Public Procurement as a *High-Value Dataset* for the purposes of Article 14 of the Open Data Directive.

Findings

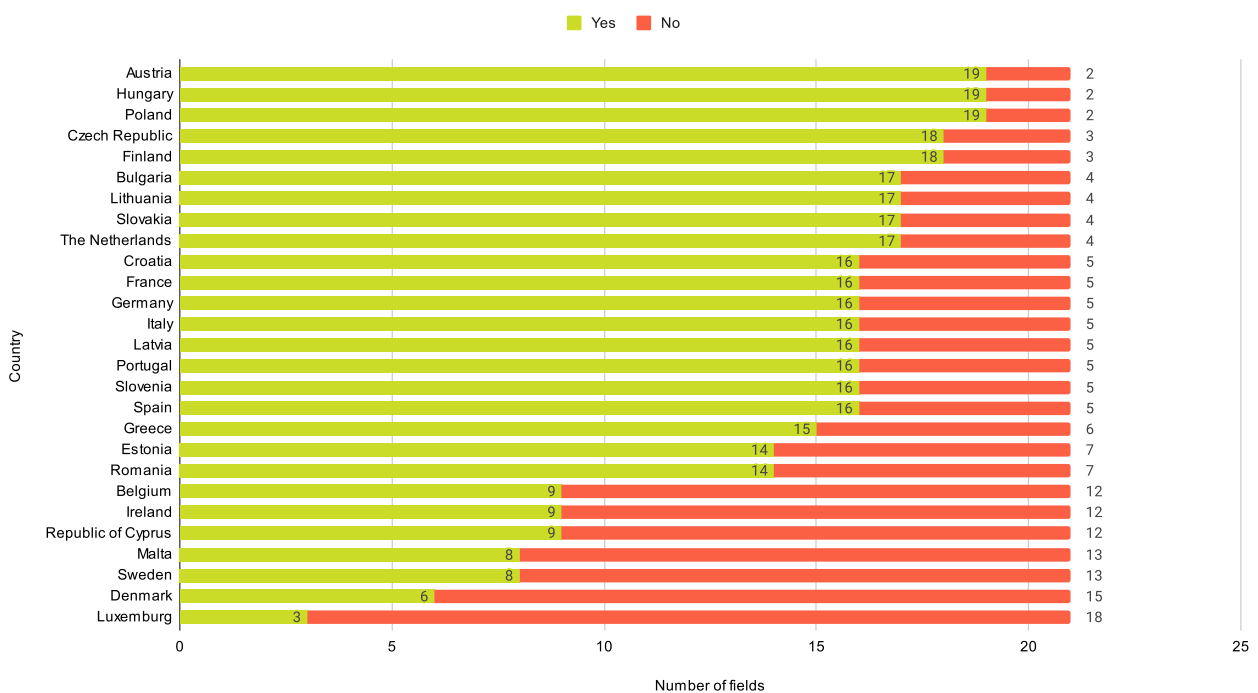
This study aims to assess the current publication levels of relevant public procurement data below the EU publication threshold across the European Union (EU). It focuses on the availability of 21 specific procurement data fields¹ in national public procurement portals or websites of the relevant national authority.

OVERALL AVAILABILITY OF DATA BY COUNTRY

The vast majority of EU countries already publish some procurement data. Out of the 27 EU countries, 27 have information available on 3 or more of the data fields assessed. In these cases, availability means that the information can be found online in structured or unstructured formats. For example, information could be disclosed in procurement portals where users can search for the tender notices online and filter by specific features but not available for download in machine-readable open formats. This shows that the national below-threshold systems collect relevant public procurement information for most countries.

Figure 1. Availability of data fields by country

Availability of data fields in procurement portals



¹ See Table 4 in the Annex

Fields related to the tender stage are the most common. These include the CPV codes, tender description, bid deadline, buyer name, and procurement method. The least common fields are contract implementation information, tenderer names and their identifiers, and the currency of the awards (however, the field's value could be inferred, for instance, if the awards are reported in the national currency).

Figure 2. Number of countries publishing key fields

Number of countries publishing key fields

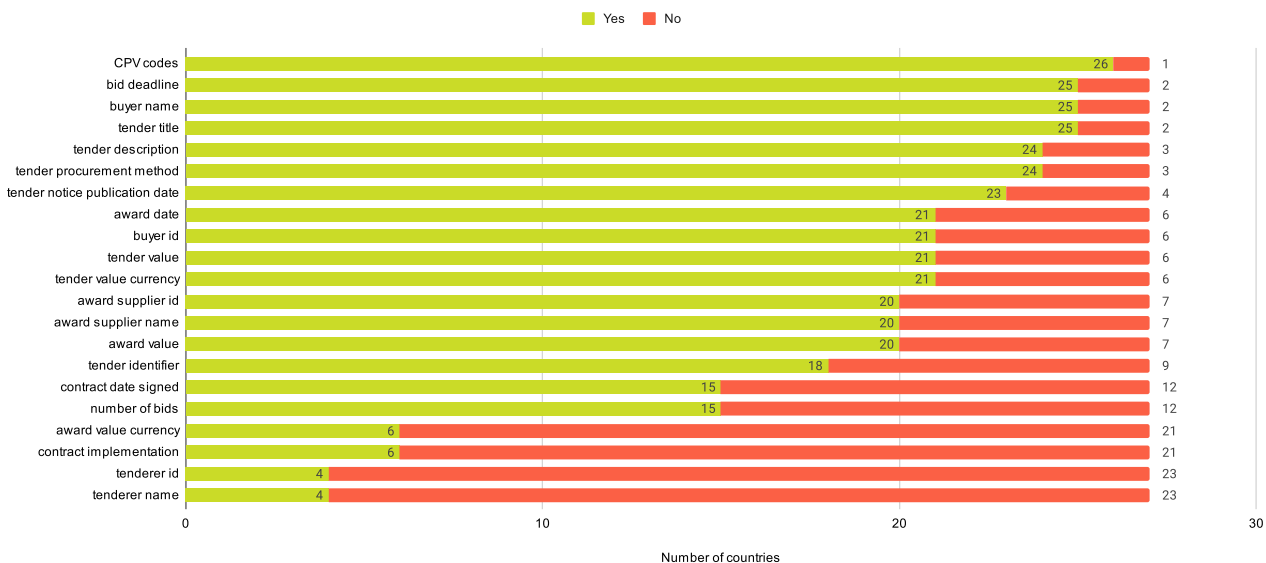


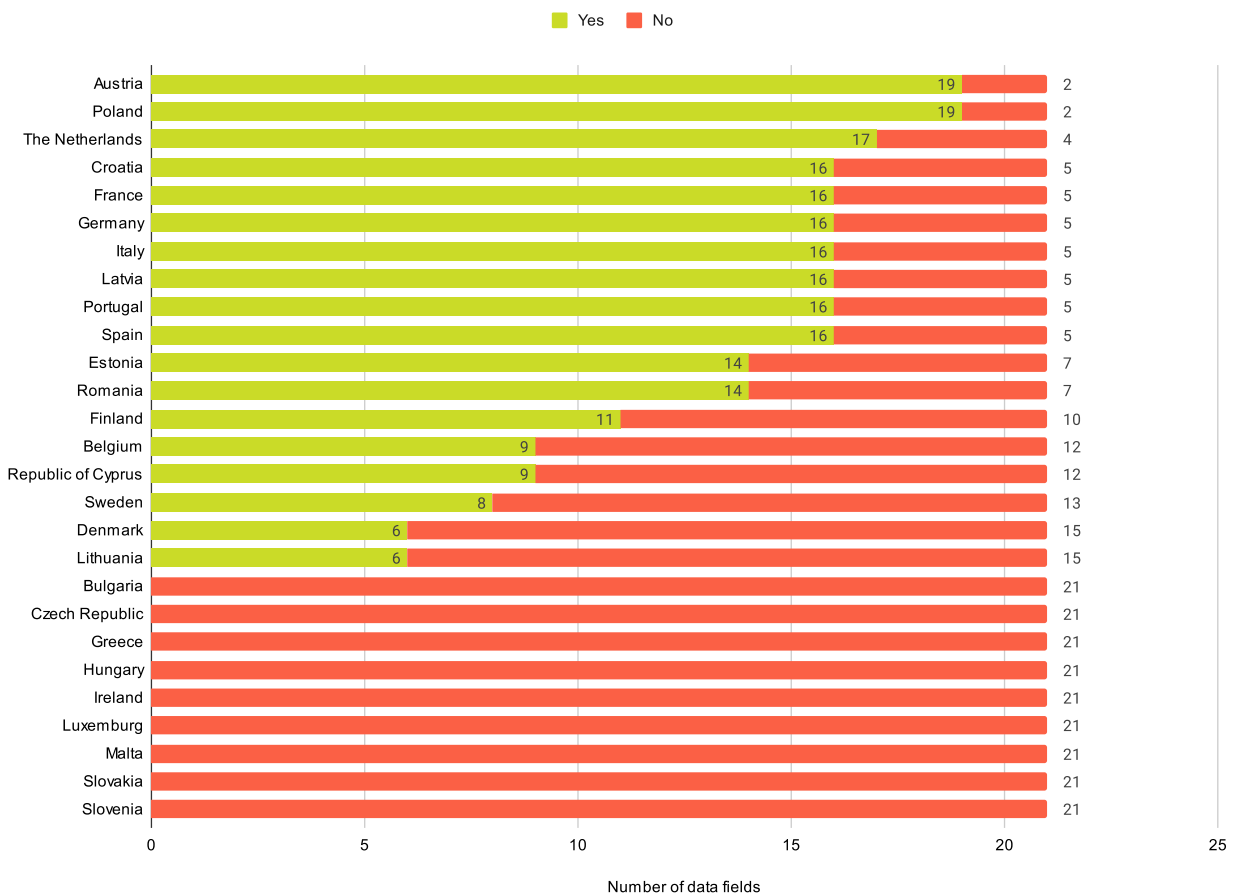
Table 1. Availability of fields

FIELD	AVAILABLE	MACHINE READABLE
CPV codes	26	17
bid deadline	25	15
buyer name	25	16
tender title	25	15
tender description	24	15
tender procurement method	24	16
tender notice publication date	23	14
award date	21	13
buyer id	21	14
tender value	21	14
tender value currency	21	14
award supplier id	20	13
award supplier name	20	13
award value	20	13
tender identifier	18	11
contract date signed	15	8
number of bids	15	10
award value currency	6	4
contract implementation	6	3
tenderer id	4	3
tenderer name	4	3

When looking at the availability of information in machine-readable formats (CSV, XLSX, JSON, XML), only 18 countries disclose some fields in these formats. For instance, in the case of Hungary, while it has 19 out of 21 fields in its system, the information is not available for download in open formats (CSV, JSON, XLM) and has to be scraped from the procurement portal, which limits access to users.

Figure 3. Availability of fields in machine-readable formats

Availability of data fields in machine readable formats

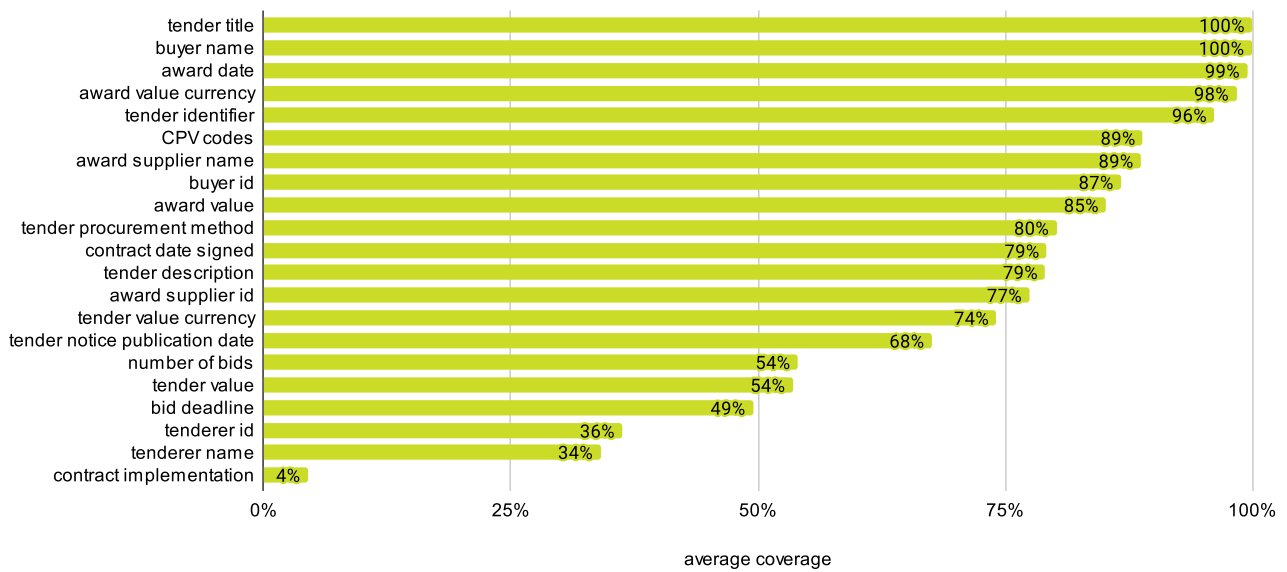


In terms of coverage, data availability for certain fields tends to be relatively high. On average, data availability is over 85% for fields related to the tender title, buyer name, award dates, supplier names and CPV codes. In comparison, for countries that publish fields related to contract implementation, the average coverage is very low (4%), meaning this information is only available for a few procedures.

Figure 4. Average coverage of fields

Average coverage of fields

Calculated only when field is available



Recommendations

Many fields we recommend publishing are included in the new [eForms](#) that all EU countries should be currently implementing. We encourage Member States to implement eForms in their entirety (as much as possible) above and below EU reporting thresholds so that they collect the relevant information in the first place. We also recommend introducing strong and consistent regulations to guarantee transparency and openness in spending below the EU and national publication thresholds.

To clarify the scope of harmonisation of data publication and unlock all the benefits mentioned above, we recommend that the next iteration of the list of High-Value Datasets includes the public procurement category and provides for a clear scope of data publication for both above and below EU and national publication thresholds, including the fields in Table 2 below.

Table 2. List of recommended fields

STAGE	DATA FIELD
Tender	<ul style="list-style-type: none"> - Tender title* - Tender description* - Tender identifier* - Buyer name^ - Buyer id^ - Tender procurement method* - Tender status* - CPV codes* - Tender value amount^ - Tender value currency^ - Tender notice publication date* - Tender end date* - Number of bids - Tenderer id^ - Tenderer name^ - EU co-financing ^
Award	<ul style="list-style-type: none"> - Award id^ - Award title^ - Award status* - Award date^ - Award value amount^ - Award value currency^ - Award supplier id^ - Award supplier name^

Contract	<ul style="list-style-type: none"> - Contract id* - Contract award id^ - Contract status - Recipient of the contract (name of the company or physical person)^ - Contract title^ - Contract start date^ - Contract end date^ - Contract date signed* - Contract value amount^ - Contract value currency^ - Contract amendments* - Contract implementation details (transactions, milestones and documents)^
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* Mandatory fields in [eForms SDK](#)
 ^ Fields included in eForms but that are not mandatory

ANNEX: Methodology

The purpose of this study was to describe the current publication levels of relevant public procurement data below threshold across the European Union (EU). We focus on the availability of information in national public procurement portals or the relevant national authority.

Out of the 27 EU countries, 14 were assessed using *Digiwhist* master data published on <https://opentender.eu/start>, a project that collects, structures and analyses public procurement data from government sources across the EU. The data is gathered from available government sources across the EU and processed as described in *Digiwhist* methodology². The period of analysis is January 2022 to August 2022. In some cases, the data was available as open data; in other cases, it was scraped from the national portals.

For two countries, Italy and The Netherlands, the assessment was done using data published following the [Open Contracting Data Standard](#) in the respective national portals. For the additional 11 countries, a manual review of the availability of information in the national procurement portals was done; however, the information was not processed and structured for analysis. Table 3 describes the list of countries assessed ([full results can be found on this spreadsheet](#)).

² <http://digiwhist.eu/publications/d2-8-methods-paper/>

Table 3. List of countries assessed

COUNTRIES	SOURCE	TYPE OF REVIEW
Austria, Bulgaria, Croatia, Czech Republic, Estonia, France, Hungary, Ireland, Latvia, Portugal, Romania, Slovakia, Slovenia, Spain	Digiwhist	Full review of availability of fields and coverage
Italy, The Netherlands	<p>OCDS publication in Italy published by the Autorità Nazionale Anticorruzione, tracks information in the Italian National Database of Public Contracts.</p> <p>OCDS publication in The Netherlands, published by TenderNed.</p>	Full review of availability of fields and coverage
Belgium, Denmark, Finland, Germany, Greece, Lithuania, Luxembourg, Malta, Poland, Republic of Cyprus, Sweden	Manual review of national portals.	Manual review of availability of fields in national portals.

For all the countries, we checked the availability of various data fields (see Table 3), focusing on below-EU publication threshold data not published in Tender electronic daily (TED). For the 16 countries with a full dataset, we measured how often the data field was present where it was supposed to be (coverage). For example, we measured the availability of award value as the number of tenders with meaningful award value (e.g. number within reasonable bounds) divided by the number of tenders awarded (have published contract award without an indication of tender cancellation). In addition, we checked whether data had been collected as open data or scrapped from the publishing system for each source.

For the remaining 11 countries, we checked if the selected fields were available in the national portals, in machine-readable formats and available for download (in CSV, JSON, XLSX, XML, RDF). For example, the tender title can be published in a procurement portal but not available as machine-readable data for download. However, in these cases, the information was not downloaded to check the coverage of the fields.

Table 4. List of data fields evaluated

FIELD	DESCRIPTION
tender title	A title for this tender. This will often be used by applications as a headline to attract interest, and to help analysts understand the nature of this procurement.
tender description	A summary description of the tender.
tender identifier	An identifier for this tender process.
buyer name	The name of the buyer, an entity whose budget will be used to pay for goods, works or services related to a contract.
buyer id	The identifier of the buyer
tender procurement method	The procurement method
CPV codes	The primary classification for the item.
tender value	The total value of the procurement.
tender value currency	The currency of the total value of the procurement
tender notice publication date	The date when the tender notice was published
bid deadline	The closing date for tender submissions.
number of bids	The number of bids received in the tender.
tenderer id	Identifier of the parties who submit a bid on a tender.
tenderer name	Name of the parties who submit a bid on a tender.
award date	The date of the contract award.
award value	The total value of the award.
award value currency	The currency of the award
award supplier id	The id of the supplier awarded
award supplier name	The name of the supplier awarded
contract date signed	The date the contract was signed.
contract implementation	Information related to the implementation of the contract

LIMITATIONS

The review was carried out using different sources based on the availability of structured data across the EU. Digiwhist was prioritised as the main source of information since it is the most advanced project gathering EU-wide data. However, its ability to accurately reflect all properties and changes in published data is limited. This is the case for some countries which have undergone major changes in publication portals since the official end of the DIGIWHIST project in 2017. To validate some of our findings, we cross-checked them with the most recent edition of the [Global Data Barometer](#) (for the countries included there).

Also, the nature of differently structured data from different legal systems (for example, procurement methods below the threshold can mean different things in different countries) implies additional imperfection in comparing results across individual countries. The results should be seen as a rough reflection of below-threshold data availability and quality in the EU. The real data availability might be better in some countries, but it is unlikely to be worse than reported.

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