

Data in Publications

A practical guide to user-friendly data in publications

This guide will help you with all of the data-related aspects of your publication: writing about data, creating data visualisations, and preparing and publishing data. It will provide you with tips and resources that will make the data in your publication more accessible and reusable.



Structuring your publication

Data, -visualisations and text are all important components of your publication. The following tips help you structure these components in a way that makes your publication pleasant to read and allows others to reuse them.

Introduce your data in a dedicated section

Create a consistent, logical sequence of text and visualisations

Provide a reference list of the data used in the publication

Include data visualisations in the figure list

Mention your data and data visualisations in the copyright notice

Obtain necessary permissions and credit third-party elements in the copyright notice



Writing about data

Writing about data and writing text for data visualisations are important but often overlooked skills. This section details some tricks and tips on how to make your copy more reader-friendly.

Use various writing techniques to make text about data more comprehensible

Make sure the text complements the data visualisation

For visualisations that are frequently updated, write generic text

Write for the web

Write in plain language



Creating data visualisations

Data visualisations present insights from data in a visual manner. Good data visualisations can act as centrepieces to your line of reasoning. The following tips will help you create understandable, accessible and appealing data visualisations.

Define the purpose of your data visualisation

Choose the right type of visualisation

Follow best design practices

Follow best data visualisation design practices

Use an accessible colour palette

Write meaningful titles for your visualisations

Write succinct visualisation legends

State the author of the visualisation, the data source and the reuse licence

Show the data values

Annotate important features

Make use of official EU geodata for maps

Decide which interactive functionalities to offer

Make sure your interactive charts are accessible using the keyboard

Create visualisation designs for different screen sizes

Keep future translations in mind



Preparing visualisations for publishing

Your visualisations may be reused in studies, shown in presentation slides or shared on social media. This section provides advice on how to prepare visualisations so that they can be found and reused by others.

If necessary, obtain permission to use third-party visualisations

License your visualisation so that others can reuse it

Add metadata to your visualisation

Write alt text for your visualisation

Export visualisations separately from the publication



Preparing data for publishing

Data needs to be carefully prepared before being published. The following recommendations guide you through open data practices that help you transform raw data into curated, high-quality and publication-ready datasets.

Improve the openness of your data

If necessary, obtain permission to use third-party data

License your data so that others can reuse it

Protect personal information before publishing your data

Decide on the scope of the data you will publish

Describe your data with metadata

Structure your data in a machine-readable format

Create documentation about your data

Save your data in a machine-readable file format



Publishing the data and the data visualisations with your publication

Releasing your data and data visualisations as individual components makes your work more impactful. The following tips will help you publish those components so that they are easy to locate and access for further reuse.

Provide your visualisations as downloads

Provide options to share your visualisation online

Provide your data as a download

Provide access to your data via an API

Publish your data in a data catalogue

About the guide

Nowadays, data has become a central component of any kind of government publication, be it a report, a study or a policy summary. Nonetheless, data is often not presented and published in a way that allows others to easily access, reuse and reference it.

Formatted as an extendable checklist, this guide compiles tips, examples and resources from across the EU. These recommendations will help you produce and publish accessible and reusable data, data visualisations and publications that contain data.

Who is the guide for?

This guide is relevant to anyone involved in the process of producing and publishing data and information for EU institutions, agencies and other bodies. This includes researchers, policymakers, communications specialists, data experts, IT specialists, publication coordinators, designers and contractors.

How should the guide be used?

The guide should be used at the very beginning of your publishing process – after you have received the OK for a publication, but before you have commissioned any work on it. Ideally, all stakeholders should be involved in the process from the very beginning. That way, each person has the chance to make use of the recommendations that are relevant to their field of responsibility, be it analysing data, writing text, creating visualisations or publishing the data.

What kinds of publication does this guide target?

The publications can be any type of published content that contains or references data. This includes reports, studies and books, assessments, briefs and summaries, press releases, leaflets and brochures – both in print and online. The data could be a primary source (data produced and analysed specifically for this publication) or a secondary source (third-party data that is used as supporting material).