

# Open data for all

The role of civil society in Germany



## Production Credits

### Bertelsmann Stiftung, Gütersloh, Germany

August 2024

### Published By

Bertelsmann Stiftung  
Carl-Bertelsmann-Straße 256  
33311 Gütersloh | Germany  
Telephone +49 5241 81-0  
[www.bertelsmann-stiftung.de](http://www.bertelsmann-stiftung.de)

### Executive Editor

Mario Wiedemann

### Authors

Mario Wiedemann, Damian Paderta, Nina Hauser,  
Petra Klug, Mila Frerichs

### Editing

Rudolf Jan Gajdacz, Munich

### Translation

Tim Schroder, Frankfurt am Main

### Graphic Design

Nicole Meyerholz, Bielefeld

### Photos

Cover: Montage: Helena Lopes/Pexels – Pexels  
License: <https://www.pexels.com/de-DE/lizenz/>

The **text** and **graphics** in this publication are licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) license. The complete licensing text can be found at: <https://creativecommons.org/licenses/by/4.0/legalcode.en>



This excludes all **photos** and **logos**, which are not subject to the above-mentioned CC license.

### Suggested Citation

Wiedemann, Mario, Damian Paderta, Nina Hauser, Petra Klug, Mila Frerichs. Open data for all. – The role of civil society. Bertelsmann Stiftung. Gütersloh 2024.

**DOI 10.11586/2024106**

# Open data for all

## The role of civil society in Germany

**Mario Wiedemann, Damian Paderta, Nina Hauser, Petra Klug, Mila Frerichs**

Many thanks to Christian Horn, Stefan Kaufmann, Dana Milovanovic and Oliver Rack for their comments on this discussion paper.

# Contents

---

Key aspects in brief: Five building blocks for open data in civil society	5
1 The Bertelsmann Stiftung's position	8
2 Introduction to open data	10
3 Open data's added value in civil society	12
4 Current state of open data in civil society	15
5 A data ecosystem for civil society	19
6 Challenges and obstacles in open data practice	25
7 How can my organization publish open data?	28
8 What can we learn and what comes next?	30
9 References	32
10 Methodological Profile: Survey on "Open Data and Civil Society"	34
About the authors	36

# Key aspects in brief: Five building blocks for open data in civil society

---

Society today is not confronted with a lack of data, but an asymmetry in access to data and a lack of ability to use it. This asymmetry makes it easier for a few tech companies to dominate the market. The model prevailing in the data economy, heavily influenced by the so-called Big Tech companies, is being expanded thanks to the concept of the open data ecosystem. This not only promotes economic progress, but also creates value for society by making it possible to access data more freely and fairly. Data can be viewed not only as an economic resource, but also as a social good that serves the public interest.

Individuals and organizations processing data often run up against barriers when they try to fully tap the potential their data offers by deploying it to the greatest extent possible. In reality, some of the data generated is not used at all. One crucial factor here is that those who could potentially generate added value by putting this data to use do not have access to it.

Making open data available entails costs: investments in technical infrastructure and capacity building. Yet the hidden costs that arise when social actors do not reuse data can be even higher. That is why, overall, such investments do in fact pay off.

## A growing data ecosystem for civil society

A diverse data ecosystem supported by various stakeholders can serve as a catalyst for social change and thus promote transparency, social innovation and democratic participation.

As part of its exploratory project Open Data and Civil Society in Germany, the Bertelsmann Stiftung has organized numerous workshops and had many discussions with civil society actors since the end of 2022 to examine the potential of open data from civil society. This discussion paper summarizes its findings.

We believe efforts to strengthen a growing data ecosystem for civil society should focus on technical infrastructure, i.e. a data portal. This should be more than just a venue for collecting data, however. Instead, it should be a place where data providers and users come together and jointly shape a dynamic data ecosystem. It should be a place for collaboration, exchange and innovation. To that extent, the data portal should initiate an inclusive process involving many stakeholders. The latter would bring with them a range of skills, knowledge and resources that enrich the data ecosystem and promote its growth and maturation. This would create a social infrastructure that not only provides data, but also offers knowledge transfer, possibilities for encouraging data use, and financial support, so that all participants – regardless of how much data experience they have or the size of their budget – can help strengthen civil society.

We have identified the following five building blocks as key elements for our work going forward. The sentences in quotation marks come from workshops with civil society stakeholders.

## BUILDING BLOCK 1 Data Portal

### “Make open data from civil society discoverable”

A data portal would make it possible to search and reuse the pool of data that civil society has at its disposal. It could also offer a link to other portals such as GovData, Germany’s metadata platform for open government data.

### “Translate standards for metadata so they are accessible to the target group”

A system of input forms connected to the data portal would translate descriptive information about the data into metadata to ensure its quality and make it easier to provide data through the portal. Any decisions required about ontology would be made in advance by experts.

### “Make open data from civil society useable and present use cases”

Open data creates value when it is used. Analytics as a Service (AaaS) increases the willingness to make data available as a public good while promoting the data literacy that is urgently needed in civil society.

## BUILDING BLOCK 2 Funding

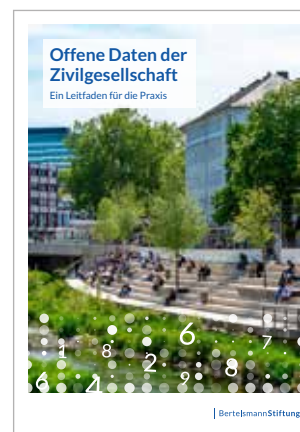
### “Make even smaller amounts available in a low-threshold way to create a financial incentive”

Preparing and providing data costs money. The costs incurred can be offset and the value created by the data can be increased by offering micro-grants with minimal bureaucracy.

## BUILDING BLOCK 3 Build Capacity for Working with Open Data

### “Provide guidance for publishing open data”

Definitions of terminology and step-by-step instructions on the topic of open data offer interested parties access to a specialized technical field. The Bertelsmann Stiftung is collaborating with experts to create reference works on open data for civil society.



### Now available

Bernhard Krabina, Offene Daten der Zivilgesellschaft. Ein Leitfaden für die Praxis. Bertelsmann Stiftung, Gütersloh 2023.

### BUILDING BLOCK 4 Stimulate Data Provision and Use

**“Facilitate low-threshold networking between technical experts and users”**

During open consultation hours, data experts could help civil society actors prepare datasets for publication. Booking a consultation would be simple and free of charge.

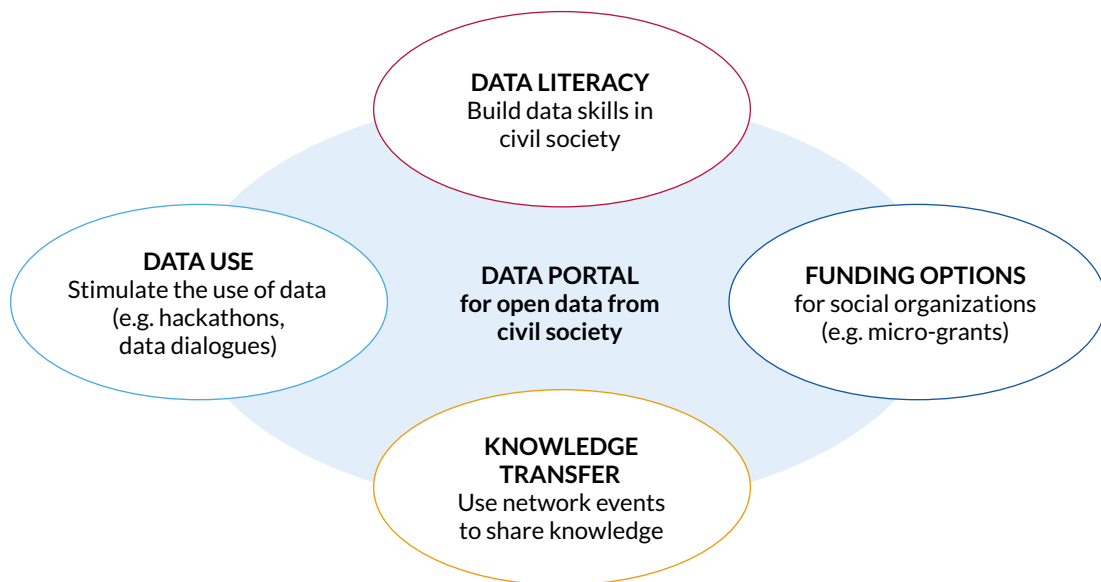
In special venues such as “data dialogues,” organizations that provide data could meet with users to work on issues and ideas related to processing (open) data.

### BUILDING BLOCK 5 Knowledge Transfer and Networking

**“Build and support an active community around open data and data use in civil society”**

An alliance of funding institutions and influential stakeholders committed to the principle of open data could make open data a mandatory part of its (funding) processes. It could dialogue with civil society and public administrators on open data at regularly scheduled events.

FIGURE 1 A socially responsible data ecosystem with the technical infrastructure of a data portal as its core element



Source: Bertelsmann Stiftung

| BertelsmannStiftung

# 1 The Bertelsmann Stiftung's position

---

It has been a topic among public administrators for many years: open data. This refers to data collected by federal, state or local authorities using public funds and made available to the public. This non-personal data sheds light on a wide range of subjects, from population growth and mass transit to the environment. Open data increases transparency for the general public and can be used by various groups, such as researchers, journalists, educators and civil society.

For civil society organizations, open data provided by public administrators can be a useful tool for a variety of activities, such as demonstrating the need for funding, writing evidence-based reports or articles, and identifying areas for future work. Civil society organizations can also become data providers themselves. In addition to their core activities, they can publish open data and contribute even more to the common good as a result. Until now, however, few civil society organizations in Germany have made their data available to others.

Yet open data from civil society offers considerable potential. For example, if data on a certain topic is not sequestered within a single organization but combined with data on the same subject from multiple providers, it increases the resulting benefits. Gaps in the data can be filled and a more complete picture can be drawn as the basis for interventions. Ultimately, this also increases social impact.

In recent years, the Bertelsmann Stiftung has undertaken various activities in Germany to raise awareness and acceptance of open data, especially among public administrators. We have organized events for promoting knowledge transfer (e.g. online workshops

and open-data network meetings<sup>1</sup>), published a guide to open data,<sup>2</sup> conducted surveys on open data at the local level,<sup>3</sup> and released the Sample Data Catalogue,<sup>4</sup> an algorithm-based tool which offers a better overview of and better access to (local) open data.

Open data is already anchored in some of our projects.<sup>5</sup> Yet we can leverage even more of the potential offered by data from our own organization. We have set the goal of publishing significantly more open data in the coming years. In the future, we want to take an “open by default” approach and make as much project-related data openly available as possible, whenever this is legally permissible.

Data expertise already exists within civil society. At the same time, civil society publishes little in the way of open data. This potential remains largely untapped and unknown. In its data strategy, for example, Germany's government is focusing on public administration, academia and private enterprises as potential data providers.<sup>6</sup> Organized civil society goes largely unmentioned. We want to close this gap together with

- 1 [https://www.bertelsmann-stiftung.de/en/our-projects/data-for-society/project-news/translate-to-english-das-kommunale-open-data-netzwerktreffen?etcc\\_cmp=nl\\_datenfuerdiegesellschaft\\_23900&etcc\\_ctv=Open-Data-Netzwerktreffen&etcc\\_med=newsletter&cHash=d45ee688546311ea3802eb18f4dbc40e](https://www.bertelsmann-stiftung.de/en/our-projects/data-for-society/project-news/translate-to-english-das-kommunale-open-data-netzwerktreffen?etcc_cmp=nl_datenfuerdiegesellschaft_23900&etcc_ctv=Open-Data-Netzwerktreffen&etcc_med=newsletter&cHash=d45ee688546311ea3802eb18f4dbc40e) (accessed Nov. 9, 2023).
- 2 Krabina 2020. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/ein-leitfaden-fuer-offene-daten> (accessed Nov. 9, 2023).
- 3 E.g. Bürger, Wiedemann and Raffer 2022. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/kommunalbefragung-open-data-2022> (accessed Sept. 18, 2023).
- 4 <https://musterdatenkatalog.de> (accessed Nov. 9, 2023).
- 5 E.g. in Wegweiser Kommune: [www.wegweiser-kommune.de](http://www.wegweiser-kommune.de) (accessed Jan. 9, 2024).
- 6 See Bundesregierung 2023.



as many other civil society organizations as possible in order to continually expand Germany's data ecosystem.

In its exploratory effort [Open Data and Civil Society](#), the Bertelsmann Stiftung's Data for Society project has been working since autumn 2022 to identify open data's potential for civil society in Germany. By "civil society," we mean actors who cannot be classified as part of government or the business community and who are committed to promoting the common good. In this case, we are not including academia in civil society. In the text below, we refer repeatedly to "organized civil society." This does not mean we are excluding all other civil society actors. We do, however, assume that organized civil society – e.g. NGOs, non-profit organizations and civil associations – offer considerable potential as a source of data.

How can this potential be leveraged? Would it even be possible for civil society to serve as a provider of open data? If so, which framework conditions should apply? We exchanged ideas with numerous representatives from organized German civil society and held several workshops. We would like to thank all participants here for their participation and their valuable input!

This discussion paper summarizes the findings from our exploratory efforts. It is meant for all stakeholders who want to learn more about the potential of open data in civil society and who, on the one hand, have set themselves the goal of making open data available and, on the other, would like to participate in an initiative for increasing the role of open data from and for civil society.

In the following, we outline the elements we believe are necessary for expanding the pool of data from civil society and creating an open data ecosystem.

To establish a shared understanding of open data, we begin with a brief introduction to its characteristics.

## 2 Introduction to open data

---

Not everyone understands the term “open data” in the same way. We have frequently found that some data providers also use the term to refer to data that may not be used for commercial purposes. There is also a widespread assumption that simply making data available on a website means it can be called “open.” We therefore provide a brief definition here to ensure a shared understanding of the concept of open data.

Open data is data that can be used, further disseminated and used again for any purpose. It is non-personal data that is made available to the public free of charge or, at most, at marginal cost. It is an important instrument for promoting transparency, democratic participation and scientific research. Open data should be made available in a machine-readable form that facilitates the data’s further processing in a simple manner.<sup>7</sup>

The objective is for data to be reused as easily as possible – by researchers, the media, educational institutions, civil society or the organization providing the data itself – so that new applications or visualizations are created, or so that the data can increase transparency or expand the supply of available information.

What is considered data in this context? Technically speaking, PDFs and webpages are also data. Open data, however, refers in particular to structured data, such as data printed as a table in a document or the underlying data which is visualized in diagrams or maps.

The publication of open data usually has three steps or aspects:

1. Legal aspect: under a free license that specifies how others may use the data
2. Technical aspect: in open and machine-readable form
3. Organizational aspect: described by metadata (more detailed information on the data published)

Organizations interested in using open data may be aware of the advantages and how they can deploy it to achieve their goals, but they might not be clear on how to take the first step. In this context, choosing the right type of license is crucial for ensuring freedom of use. This choice is the main factor influencing the data’s use, dissemination and potential social impact. The manual *Offene Daten der Zivilgesellschaft: Ein Leitfaden für die Praxis (Open Data and Civil Society: A Practical Guide)*,<sup>8</sup> which was published as part of the Bertelsmann Stiftung’s exploratory project *Open Data and Civil Society*, contains detailed information on the suitable licenses. It also provides information on the different implementation phases, along with questions and answers on data catalogues and data portals.

---

<sup>7</sup> This and the following three sections are taken, with slight modifications, from the Bertelsmann Stiftung’s guide to open data: Krabina 2023.

---

<sup>8</sup> Krabina 2023.

  
**Quote**

” *“Open data is a fundamental building block of modern, participatory urban development. Unfortunately, it’s a topic that receives far too little support or attention, especially at the local level. Instead, municipalities often create their own expensive platforms and apps that no one can engage with after just a few years.”*

*Answer to the question “What do you associate with the term ‘open data’?” from our survey of civil society organizations.*

### 3 Open data's added value in civil society

At a time when social, ecological and political challenges are becoming ever more complex, the publication of open data represents a paradigm shift that has far-reaching implications for how knowledge is acquired by organizations and society as a whole. Open data acts as a catalyst for a series of processes and mechanisms that transform both organizations' internal structures and their external impact.

Making data openly available can increase an organization's **legitimacy** among the public. At many civil society organizations, creating **transparency** for outsiders is an important factor in building trust. In the Bertelsmann Stiftung's survey on "Open Data and Civil Society," 85.6 percent of the respondents say that open data adds value by "strengthening transparency" (see Figure 2). When organizations that already release open data were asked which aspects were im-

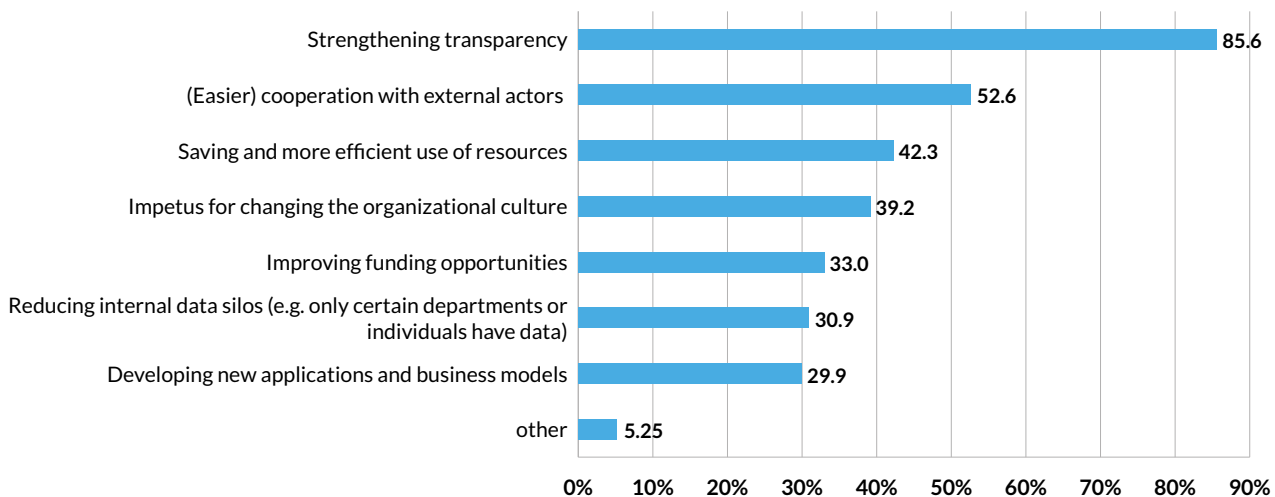
**Quote**

*"The possibility of combining open data from public institutions with the data we collect ourselves in order to identify the needs and the impact of activities in our field. Providing data ourselves on the specialized field represented by our association in order to close existing gaps in the data."*

*Answer to the question "What do you associate with the term 'open data'?" from our survey of civil society organizations.*

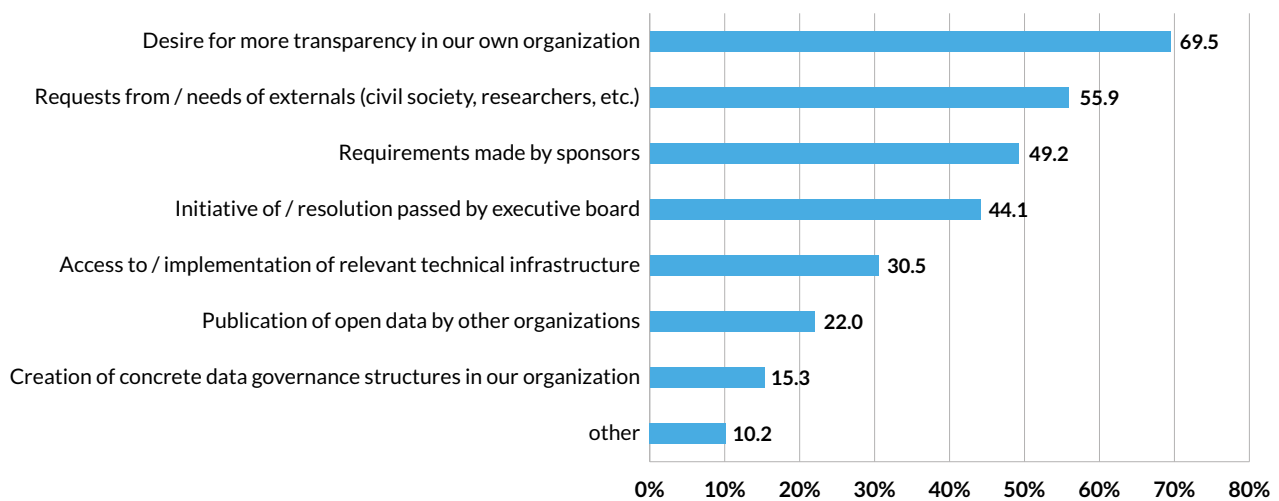
portant in their decision to do so, 69.5 percent cited "the desire to increase our own transparency" (see Figure 3).

**FIGURE 2 What added value do you generally ascribe to open data?**



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

FIGURE 3 Which aspects were important in arriving at your organization's current state of open data provision?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97 (here 59, otherwise NA)

| BertelsmannStiftung

Publishing open data lays the foundation for empowerment and an **evidence-based advancement of one's own interests**. NGOs and other non-profit organizations can use this data to gather evidence-based arguments for their causes. This expands their collective capacity to overcome complex social challenges and enables more effective collaboration with other organizations.

The **dissemination and reach of open data** are exponentially increased when more stakeholders are involved. Open data has a multiplier effect for spreading information and it offers a wealth of opportunities for extending the reach and impact of data. It serves as a reliable source for journalists and their reporting. It promotes public discussion and increases awareness of certain issues.

The concept of **multi-stakeholder engagement** is also key. Open data facilitates access to information for a wide range of stakeholders, from individuals to research institutions. This creates space for new partnerships and synergies that can lead to innovative strategies and solutions.

Another important aspect is **reducing bias** and closing information gaps. Open data can play a particularly valuable role if it contains information about margin-

#### Quote

“Carrying out its own analysis of data from freely accessible sources helps civil society to make its decisions based on more evidence, justify its goals and arguments using data-driven facts, objectify the discourse, and more effectively evaluate developments in politics, public administration and business. Open data helps civil society watchdogs and journalists all around the globe monitor efforts by politicians, political administrators and the business community to achieve socially agreed objectives, and identify undesirable developments threatening those objectives or the common good.”

“Open data from public authorities, businesses and civil society is therefore part of an emancipatory information infrastructure that promotes objectivity, commitment and trust. To that end, freely accessible open data from civil society organizations has great social value.”  
Oliver Rack, Open Government Netzwerk and Politics for Tomorrow

alized or underrepresented social groups. Not only can it fill important data gaps, it can also be used by governments, academic institutions and other civil society organizations for a variety of purposes.

Advantages also accrue **within organizations** that publish open data. Making data available to outsiders exposes it to more extensive quality checks, which in turn can improve the quality for in-house users. This promotes the dismantling of internal silos and generates synergies. Errors and inconsistencies are identified more quickly not only within the organization, but also by external stakeholders, leading to faster corrections. These feedback mechanisms increase the reliability and accuracy of the data. Finally, standardizing the data promotes its integrity and facilitates internal quality control. Adhering to these standards reduces the likelihood of errors, making the data more consistent and reliable.

If they have access to comprehensive and diverse open data sources, **AI models** can be developed or trained more effectively, which can lead to sounder analyses and better interventions in social, environmental and health contexts. This is important for maintaining ethical standards, especially with regard to discrimination, fairness and social justice.

Open data can also serve as a tool for **democratizing information**, which shifts power structures and thus enables a more inclusive, transparent and effective engagement with information.

#### Quote

*“This initiative has a lot of exciting potential: We can draw on the experience of open government information and already know which supposed solutions raised new questions in the past. The direct focus should therefore be on the reusability of information, internally and externally – and on which in-house conditions for infrastructure civil society organizations need to create for this. Not every organization will want to use and provide linked data – but if the technical framework is already considered now, all options for taking action will be open in the future. As with government data, this requires a solid, far-sighted IT architecture.”*

*Stefan Kaufmann, Wikimedia Deutschland*

## 4 Current state of open data in civil society

---

The topic of open data is closely interwoven with civil society. Many public administrators justify their open data strategies with the argument of promoting transparency for civil society and as a basis for cooperating with it. Open data is an important cornerstone of the principles underlying open, transparent governance, or open government. In 2011, the Open Government Partnership (OGP) was launched on the initiative of then US President Barack Obama. The Federal Republic of Germany joined the initiative in 2016. A key element of the OGP is the involvement of civil society, which submits suggestions for activities relating to transparency, participation and open data and which evaluates proposals from public administrators and their implementation as part of cyclical reporting.

Although major open data projects exist that were initiated by civil society, such as Wikidata, OpenStreetMap and data from citizen science projects, they have not been widely associated with the concept of open data. A closer look shows that larger civil society organizations in particular still have considerable catching up to do when it comes to publishing open data. It is important that these organizations improve their data accessibility and transparency in order to maximize the resulting benefits for democratic processes and social participation. This became increasingly clear at the European meeting of the Open Government Partnership in Rome in October 2022,<sup>9</sup> as noted by [Helena Peltonen](#), who attended the OGP regional meeting on behalf of the civil society organization [Open Government Netzwerk Deutschland](#):

*“The picture we have of our societies remains incomplete if it is only drawn using government data and information. By collecting new or linking accessible data, civil society can provide new perspectives and thus balance out the picture. Above all, civil society actors can learn a lot from each other across borders. One example is Integrity Watch published by Transparency International EU, which Transparency Deutschland has now implemented in Germany.”*

There are already good examples on an international level of how civil society can provide open data. Several of them are described briefly below.

### International development cooperation as pioneer

The International Aid Transparency Initiative (IATI) brings together governments, multilateral institutions, the private sector and civil society organizations that are involved in development cooperation. IATI discloses where, from whom and for what purpose funds flow into development cooperation, and a data standard has been expressly developed for this purpose. Portals such as [d-portal.org](#) present the IATI data in a user-friendly manner. For IATI, transparency is not an end in itself. Ultimately, the goal is to improve coordination in the area of development cooperation and achieve greater impact.<sup>10</sup>

---

<sup>9</sup> Europe Regional Meeting of the Open Government Partnership: <https://www.opengovpartnership.org/events/europe-regional-meeting/> (accessed Sept. 7, 2023).

<sup>10</sup> <https://iatistandard.org/en/using-data/how-to-use-iatl-data/> (accessed Sept. 7, 2023)

## United Kingdom: Making funding flows transparent

A similar approach for improved coordination and greater impact has been adopted by 360Giving in the UK.<sup>11</sup> Launched in 2015, the portal makes data from public and private funding organizations available in a standardized format. The uniformity makes it possible to answer a range of questions: Who is funding whom? Which sectors receive more funding than others? Which regions receive the most funding? This makes it possible for funders to organize themselves better and researchers can access the data to gain new insights. The portal offers several tools for visualizing the data.

Approaches for creating greater transparency on the activities of non-profit projects exist in other countries as well. The following describes an example from the United States.

## United States: Increasing transparency of non-profits

In the US, non-profit organizations with tax-exempt status must file an annual statement with the tax authorities (Form 990). The statement contains data on the organization and its finances, as well as information on the projects the organization carries out. Since 2016, this data must be provided to the authorities in an open, machine-readable format. Until now, however, considerable effort has been required to analyze the data in a low-threshold manner. As a result, five civil society organizations are currently working on making the data available via a central, user-friendly portal. They also want to deploy a large language model (LLM) so that users can submit a question to the portal and receive an answer based on the available data.<sup>12</sup>

The above examples describe possibilities for creating transparency based on funding. The following example takes a broader approach.

<sup>11</sup> <https://www.threesixtygiving.org/> (accessed Sept. 8, 2023).

<sup>12</sup> Stiffman 2023.

### Quote

*“Open Data and Civil Society is a wonderful initiative because it is important and it flips the script. The question is no longer just what the state can contribute to open data in order to benefit society, but what civil society can do as well. Moreover, it’s helping raise awareness of the issue of open data and turn it from an esoteric event into a popular sport.”*

*Dieter Zinnbauer, Copenhagen Business School*

## Austria: Open data portal for civil society and business

Similar to govdata.de in Germany, Austria’s public administration operates data.gv.at, an open data portal that only contains data from public authorities. A separate open data portal has therefore been created that can also be accessed by Austrian civil society: opendataportal.at, which organizations that are not part of the country’s system of public administration can use to make their data available.

There are already more than 60 organizations whose open data can be found at opendataportal.at. The portal, however, offers few other functions beyond standard searches for datasets. That is why the focus here is less on the technical implementation than on the project itself and the insights it offers. What stakeholders in other countries can learn from it is that data providers must be actively recruited – for example through micro-grants or networking opportunities and knowledge transfer.

## Projects organized on a voluntary basis

Wikidata is a project under the auspices of Wikimedia that launched in 2012. It is a freely accessible knowledge database that acts as an essential data source for Wikipedia’s more than 300 language versions. It is designed so it can be used and augmented by both people and computers. At over 100 million pages, it is currently the largest Wikimedia project.



Another example of an open data project supported entirely by volunteers is Sensor.Community. In over 70 countries around the globe, more than 13,000 sensors have been set up (as of October 2023) to generate environmental data on topics such as pollution from particulate matter. The data can be used to provide the public with more comprehensive and targeted information. Historical information is available in the Sensor.Community archives as open data, and current readings from the Sensor network are also accessible via an application programming interface (API). A visualization of the current readings can be found at [Maps.Sensor.Community](https://maps.sensor.community).

Wheelmap is another well-known example. The platform makes it possible to find, list and rate wheelchair-accessible locations. Wheelchair users around the world access [wheelmap.org](https://wheelmap.org) to plan the routes they take each day. The site's maps are based on geo-data from OpenStreetMap, a global map with a large community which provides open data under a free license.

### Survey: Open data meets with approval

Despite the positive examples from civil society described above, the publication of open data does yet appear to be standard practice. In the survey of civil society organizations conducted by the Bertelsmann

Stiftung,<sup>13</sup> a slight majority of respondents (53.6 percent, n = 97) say that their organization already publishes open data. Of those surveyed, 34 percent say they have yet to engage with the topic.

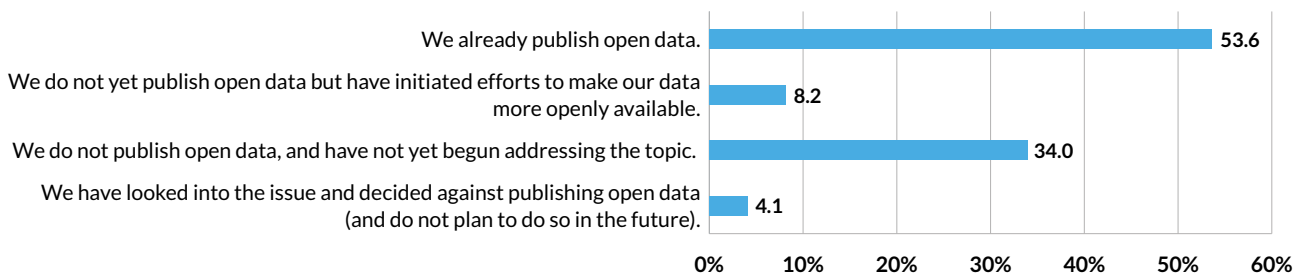
The question remains as to whether all of those who participated in the survey had the same understanding of open data (e.g. machine-readability, open license) and whether they consider simply publishing information on a website to be open data. The question "From the perspective of your organization, what do you associate with the term 'open data'?" produced the following responses, among others:

- Accessible to the public (website, newsletter, etc.)
- Data on the organization available via the website
- Accessible to everyone free of charge

However, even if some of the organizations that say they already publish open data are not doing so according to the definition used here (see section on "What is open data?"), the results show that only 4.1 percent of the organizations surveyed say they have made a conscious decision not to make data openly available. The topic is much more widely embraced than rejected.

<sup>13</sup> In July and August 2023, the Bertelsmann Stiftung carried out a survey on "Open Data and Civil Society" together with Ziviz GmbH. More information can be found in Section 10 "Methodological Profile: Survey on 'Open Data and Civil Society.'"

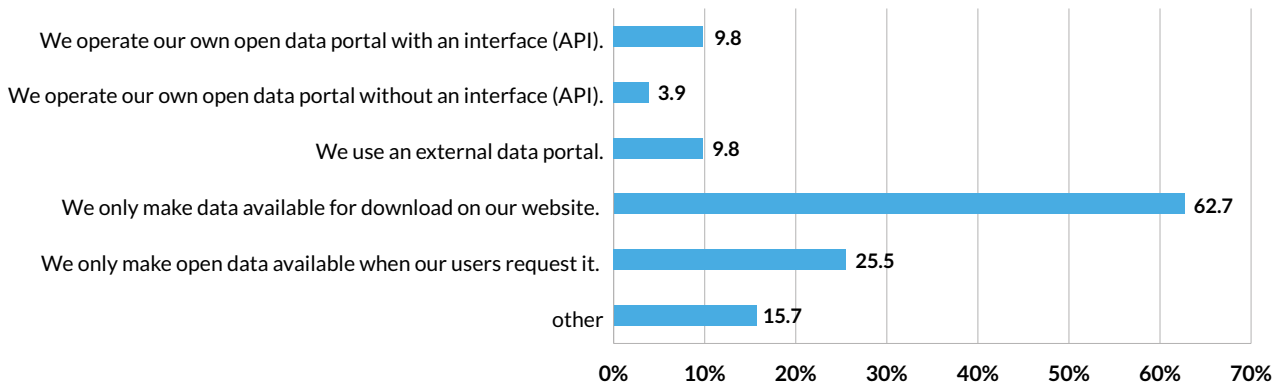
FIGURE 4 How would you describe your organization's current efforts to publish open data?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung

FIGURE 5 How does your organization make data openly available?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97 (here 59, otherwise NA)

| BertelsmannStiftung

Although some civil society actors already offer open data, it is often difficult to find them. Searching many different websites for the right data is tedious and time consuming. In the realm of public administration, metadata portals such as govdata.de are a good reference point. So far, there is nothing comparable for civil society. At the same time, discoverability is only one factor for leveraging the potential of open data. Creating a data ecosystem in civil society requires much more.

**Quote**

” *“An important issue. We often expect others to do it while remaining hesitant ourselves.”*

*Answer to the question “What do you associate with the term ‘open data’?” from our survey of civil society organizations.*

## 5 A data ecosystem for civil society

---

Data can be seen as a versatile infrastructure resource, similar to energy or transportation networks. It serves as a universal input for a range of outputs, from analysis to AI applications. Data is a crucial resource in the digital age, but access to data and the ability to make use of it are unevenly distributed. Large amounts of data are currently concentrated in the hands of private companies, which use it for their own purposes. This leads to a number of problems, including unequal access to data, data monopolies, limited innovation and a weakening of public control.

In recent decades, the collection of data, especially by the major platform providers, has sometimes proven to be unfair, illegal or even harmful. The unsustainable use of personal data has had negative consequences that have undermined trust in digital systems. This has become apparent in growing concerns about privacy and an increasing reluctance to share data. As undesirable actors gain possession of our data, we become more suspicious not only of harmful efforts to share and use data, but also of efforts that benefit society.

### Data asymmetries as social challenge

We are therefore not confronted with a lack of data, but with an asymmetry in accessing data and a limited ability to use it. This asymmetry strengthens the market dominance of a few tech companies. The prevailing model in the data economy – largely determined by the so-called Big Tech companies, which concentrate on collecting and using personal data to maximize profits – is being expanded by the emerging concept of the open data ecosystem. This model not only promotes economic progress, but also con-

tributes significantly to social value by enabling freer and fairer access to data. Taking this approach makes it possible to use data and create value for the benefit of all. Data can be viewed not only as an economic resource, but also as a social good that serves the public interest.

Actors who process data often run up against certain limits when it comes to exploiting the data's full potential and making full use of it. In reality, some of the data generated is not used at all. A key factor here is that those who could potentially add value by deploying the data have no access to it.

Making open data available entails costs, i.e. investments in technical infrastructure and capacity building. Yet the hidden costs that arise when social actors do not reuse data can be even higher. That is why, from the perspective of society as a whole, the investment is worth it.

Creating an open data ecosystem for civil society is not only a technical challenge, but a political one as well. It requires the collective will to view data as a common good and to structure governance mechanisms accordingly. In this way, the transformative power of open data can be fully exploited and used to benefit society as a whole.

### The role of civil society in the data ecosystem

A diverse data ecosystem supported by various stakeholders can serve as a catalyst for social change and thus promote transparency, social innovation and democratic participation.

By making data openly available, civil society actors in particular can help reduce inequalities and discrimination. Their role, however, goes far beyond merely publishing and using data: Organized civil society acts as a connection and mediator between different stakeholders, such as the government, private sector, public and researchers.

Civil society plays an important role within this multi-layered network of relationships and interactions. It is not just a passive consumer of open data. Instead, it becomes a central, active force in shaping and developing the open data ecosystem. Its tasks include bringing together different stakeholders, promoting synergetic relationships and fully exploiting open data's democratic and social potential. These efforts lay the foundation for an inclusive, transparent and innovative data ecosystem that benefits all members of society.

In its Data Ethics Canvas, the UK-based Open Data Institute (ODI) describes one objective as follows: "We want to prevent a future in which data is feared or hoarded. We want data to benefit everyone."<sup>14</sup>

14 Open Data Institute 2019.

#### Quote

” *“Non-profit organizations are often just getting started when it comes to making use of today’s data applications. This welcome initiative from the Bertelsmann Stiftung creates new incentives for non-profits to focus on advancing these capabilities by highlighting the sector- and society-wide benefits that result from opening up socially responsible data. This could serve as the impetus organizations need to invest strategically in data activities. A critical success factor here will be to not simply do what is technically feasible, but to systematically address the challenges in organizational culture, skills and resources that have hindered progress to date.”*  
Claudia Juech, Bloomberg Philanthropies

## Important components of a data ecosystem in civil society

What are the components that we feel are important for establishing a data ecosystem in which civil society plays an active role as a data provider and data user? These components should be designed in such a way that they promote the active participation in civil society and, at the same time, ensure the integrity, security and usability of the data.

## Key components for an effective data ecosystem

### Technological infrastructure

- **Accessible data platforms:** Platforms that are user-friendly and accessible to everyone promote the active participation of civil society.
- **Interoperability:** Different data sources and formats should be compatible with each other in order to enable a broad use and combination of data.
- **APIs and SDKs:** Making interfaces and software development kits available can facilitate the integration and use of data.

### Education and capacity building

- **Educational resources:** Tutorials, workshops, networking formats, etc. can strengthen data skills within civil society.
- **Community support:** Forums, FAQs and help desks can assist users who have technical or conceptual questions.

### Participation and governance

- **Multi-stakeholder models:** Inclusion of different interest groups in data-related decision making.
- **Feedback mechanisms:** Opportunities for civil society to provide feedback and participate in the ongoing development of the data ecosystem.
- **Transparency in data processing:** Clear information on how data is collected, processed and used builds trust.

## Legal framework

- **Data governance structure and accountability:** Establish a clear structure for responsibilities relating to data collection, processing, storage and publication. This includes the clear assignment of roles such as data administrator, data protection officer and data analyst.
- **Guidelines for the ethical and legal use of data:** Clear and practical guidelines for compliance.
- **Guidelines for the accessibility and usability of data:** This includes the use of standards for data formats and interfaces to ensure interoperability, alignment with international standards and best practices, and specification of update frequencies and data quality metrics.

## Financing and sustainability

- **Public and private funding:** Financial support is necessary to build and maintain the infrastructure.
- **Sustainability models:** Long-term planning for ensuring the continuity of the data ecosystem.

Having outlined the central role of civil society as an active co-creator and user in the open data ecosystem, we must now identify specific building blocks we can strategically realize in order to lay a solid foundation for the ecosystem and guarantee its sustainability. In doing so, it is essential to create a technological infrastructure such as a data portal to serve as the core element for accessing and using the data. A dedicated data portal for civil society could not only improve the discoverability and availability of data, but could also be a decisive step towards strengthening the active participation and influence of civil society in the data ecosystem.

## A data portal for open data from civil society

Data from Germany's public authorities is discoverable through the portal GovData. Public administration data can be found here from the federal, state and local levels. However, the portal is reserved solely for data providers from the public sector. Although civil society organizations can publish their data on their own websites, on platforms such as GitHub and Zenodo, or even on their own open data platforms

such as CKAN and DKAN, the data cannot be made available on national metadata portals such as GovData or international portals like data.europa.eu. Implementing a data portal for civil society is of crucial importance for improving the accessibility of open data across a broad range of organizations. It should also offer the possibility of linking to portals such as GovData (should those portals allow this). Such a portal for civil society, however, should go beyond simply making data discoverable. In addition to its role as a metadata or data portal that facilitates data searches and downloads or accessing data via interfaces, it should serve as a platform capable of addressing other needs as well.

One key aspect here could be the promotion and dissemination of data standards as they develop. Civil society organizations addressing the same or similar issues could share and use data more easily and effectively if they had uniform standards to rely on. Such a comprehensively designed portal would thus not only simplify the accessibility and use of data, but also significantly improve the quality and consistency of data within civil society.

A data portal for civil society should be more than just a site for pooling data. It should create a vibrant meeting place where data providers and users come together to shape a dynamic data ecosystem. Such a data portal should be a catalyst for an inclusive process involving many stakeholders. The latter could contribute a wealth of competencies, knowledge and resources that enrich the ecosystem and promote its growth and maturation. This would give rise to a network that not only provides data, but also offers skills, tools and support so that all participants – regardless of how extensive or limited their experience using data is – could achieve their objectives and help strengthen civil society.

## Networked open data

The current landscape still lacks a data portal created especially for civil society. It is therefore particularly important for civil society organizations to concern themselves with the discoverability of their data.

**Quote**

” *“Since our entire IT is managed and operated by volunteers, we would need an all-round package with off-the-shelf solutions and tools for anonymization, processing and publication.”*

*Answer to the question “What kind of support would your organization need to publish open data?” from our survey of civil society organizations.*

Since they are more reliant on search engines and data networks, the use of rich metadata – data that provides information about other data – can significantly improve discoverability. Such metadata helps search engines to connect users with the right data. This catalogue metadata is based on standards like DCAT (Data Catalog Vocabulary) and DCAT-AP, which are useful not only for public-sector data but also for data from civil society.

It’s about more than just metadata, however. Linked open data – the networking of open data – is becoming increasingly important. This is when an organization links and standardizes its own data with that of other organizations, increasing the data’s discoverability and usefulness. This is achieved through the standardized publication of data and the use of best practices. Vocabularies, also known as ontologies, are useful here in describing the types of data more precisely.

Not only does this networking increase the discoverability of data, it also helps search machines to deliver better results. It can also be valuable for identifying other organizations using similar data and for highlighting possibilities for cooperation. It is therefore a good idea to look at ontologies and standardization early on in such initiatives.<sup>15</sup>

15 The DataCube vocabulary is a good starting point for statistical data, since it makes it easier to become familiar with linked open data and to use ontologies without having to create one’s own vocabularies. See The RDF Data Cube Vocabulary: <https://www.w3.org/TR/vocab-data-cube/> (accessed Oct. 25, 2023).

**Promoting data literacy**

In the Bertelsmann Stiftung workshops held as part of the exploratory project Open Data and Civil Society, the importance of data literacy in civil society was repeatedly emphasized. On the one hand, the skill sets required for internal data management often need to be expanded; on the other, additional skills are required for processing open data.

The Bertelsmann Stiftung has therefore published an open data guide for civil society organizations that contains practical approaches to making open data available.<sup>16</sup> This also meets a need that became apparent in the foundation’s survey of civil society organizations: In response to the question “Which types of support does your organization require to publish open data?”, 88.7 percent of the respondents replied, “Practical assistance such as guidelines” (n = 97; see Figure 6).

Existing initiatives and organizations that impart data skills should also be involved. One example is CorrelAid e. V., an extensive network of volunteer data analysts. Another example is the Civic Data Lab<sup>17</sup> funded by the German Ministry for Family Affairs, Senior Citizens, Women and Youth, which is supported by CorrelAid, the German Informatics Society and the German Caritas Association. The aim of the Civic Data Lab is to expand data skills in civil society.

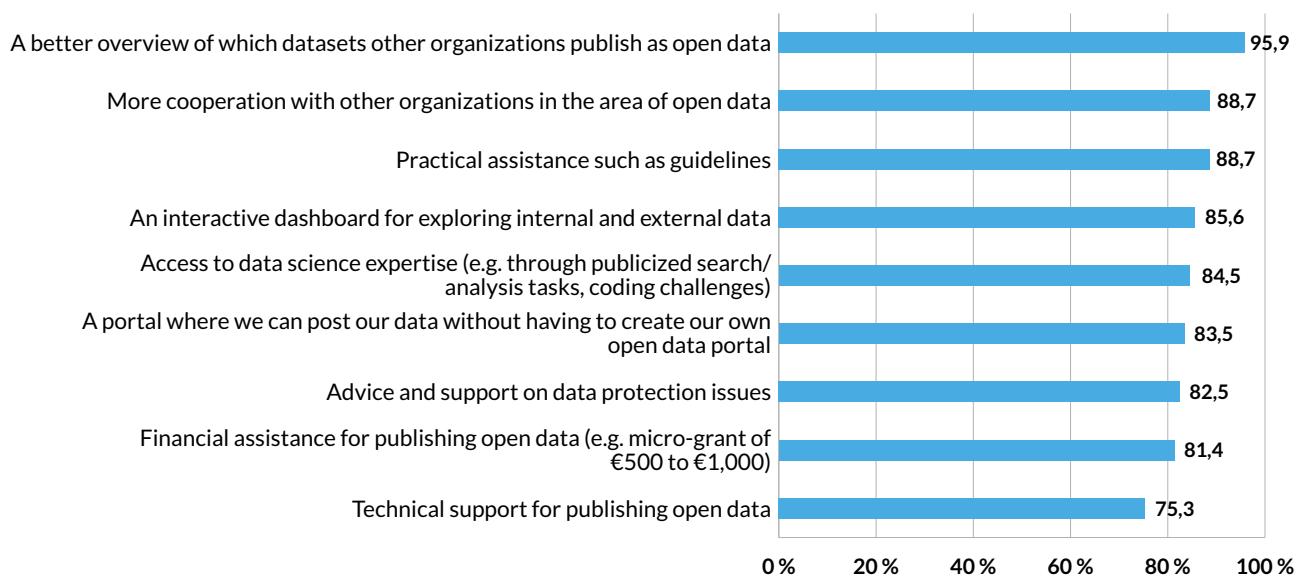
**Creating funding opportunities**

There are already organizations in civil society that have the expertise and skills to make open data available. Other organizations, on the other hand, require support. This could be provided in the form of micro-grants, e.g. through the micro-funding program run by the Deutsche Stiftung für Engagement und Ehrenamt (German Foundation for Engagement and Volunteering). Even smaller amounts of a few thousand euros can be decisive for civil society organizations, especially those run by volunteers. In the Bertelsmann Stiftung’s survey, 81.4 percent of respondents said they would like financial assistance for publishing open data (see Figure 6).

16 Krabina 2023.

17 Civic Data Lab: <https://www.caritas-digital.de/projekte/civic-data-lab/> (accessed Nov. 5, 2023).

FIGURE 6 What kind of support would your organization need to publish open data?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97 (here 59, otherwise NA)

| BertelsmannStiftung

## Encouraging data use

When civil society organizations decide to make their data freely available, they also want the data to be used. Various target groups can be considered potential data users, including:

- Other civil society organizations and initiatives
- Media organizations
- Academic researchers
- Public administrators
- Educational institutions

It is not possible to predict how the data will actually be deployed. However, specific formats can be created that encourage its use. For example, the Bertelsmann Stiftung organized “data dialogues” with volunteer data analysts from the CorrelAid network.<sup>18</sup> During the one-day in-person events, members of the Bertelsmann Stiftung’s project teams discussed specific data-related questions with the analysts in order to identify actionable answers. The feedback was very positive and follow-up events are planned. Similar gatherings could also be organized to include other civil society organizations beyond just the Bertelsmann Stiftung. In the UK, the NESTA innovation

agency pooled its experience from data projects with NGOs in 2015 and made the following recommendation:

**“Better investment in data skills in the third sector: Government and philanthropic organisations should invest in programmes that build collaboration between data scientists and organisations in the third sector.”**

NESTA 2015: 59

## Supporting knowledge transfer

New, innovative topics require stakeholders to exchange ideas and experiences, something that public administrators are doing as they process open data. In 2021, the Bertelsmann Stiftung and the German Institute of Urban Affairs launched the municipal Open Data Network Meeting,<sup>19</sup> which has since become a regular event. Every two months, some 100 participants come together to discuss a topic from the field of open data – practitioners learning from each other’s experience.

<sup>19</sup> The municipal Open-Data Network Meeting: <https://www.bertelsmann-stiftung.de/en/our-projects/data-for-society/project-news/translate-to-english-das-kommunale-open-data-netzwerk-treffen> (accessed Sept. 28, 2023).

<sup>18</sup> Hauser and Klug 2023.

The OK Labs from Code for Germany are another established forum for exchange.<sup>20</sup> As part of a larger network, volunteers gather at over 20 local OK Labs to implement non-profit digital projects in their region. They often work with open data from local authorities.

Events of this type could also promote a transfer of skills among civil society organizations. Relevant questions here could be:

- Which data or topics could be of interest to data users?
- How can I describe my data so that it can be linked to data on similar topics?
- How can I reduce the effort needed to automatically publish open data?

Civil society organizations already seem willing to enter into an exchange on the topic of data. In the

<sup>20</sup> Code for Germany: <https://codefor.de/#:~:text=Code%20for%20Germany&text=Code%20for%20Germany%20ist%20ein,in%20lokalen%20Labs%20und%20online> (accessed Nov. 9, 2023).

**Quote**

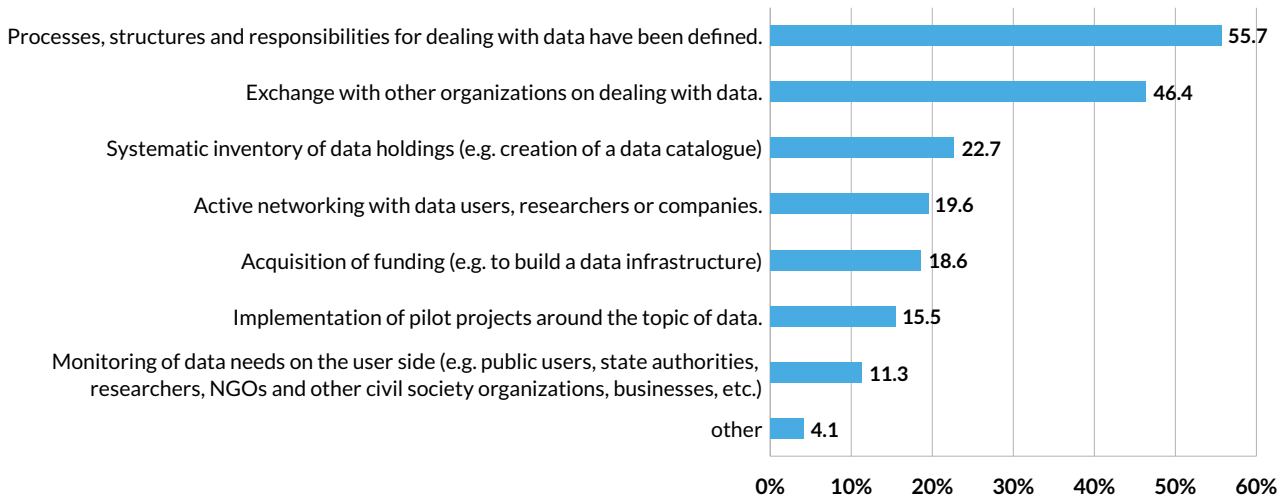
*“Open data should not just be an end in itself.”*



*Answer to the question “What do you associate with the term ‘open data’?” from our survey of civil society organizations.*

Bertelsmann Stiftung’s survey, when asked “Which measures are already being pursued in your organization to create a data infrastructure?”, almost half of those surveyed (46.4 percent, n = 97; see Figure 7) said, “Exchanging information with other organizations on dealing with data.” Participating in the relevant dialogue events would help meet this need and make it possible to explore the topic in greater detail. The participants’ attention could also be directed towards the issue of open data.

**FIGURE 7 Which steps is your organization already taking to build a data infrastructure?**



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung



# 6 Challenges and obstacles in open data practice

Sharing data can bring numerous benefits, as discussed in sections 3 and 4. Yet certain obstacles are also present and have been articulated by civil society representatives. In the Bertelsmann Stiftung’s survey of civil society organizations, when asked “When it comes opening your data, do you feel there are more opportunities or risks for your organization?”, 35.0 percent of respondents say “mainly opportunities” or “some opportunities,” while 42.3 percent say “both opportunities and risks” (n = 97). And 17.5 percent say “mainly risks” or “some risks” (see Figure 8).

In response to the question “Which risks do you generally ascribe to open data?”, a majority of 72.2 percent say “privacy violations.” At just under 64 percent, the next most common response is “misuse of data” (n = 97, multiple responses possible). In some cases, the other possible responses lie well below 50 percent (see Figure 9).

### Quote

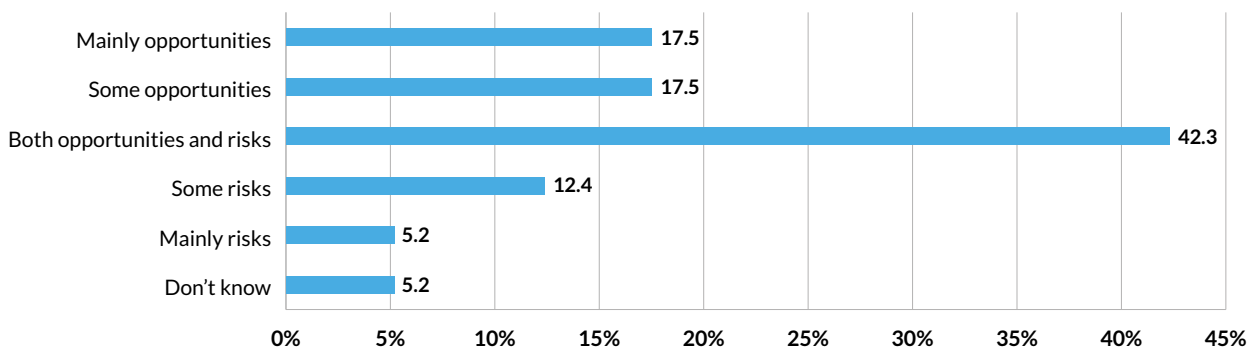
*“Data cemeteries in the Internet.”*



*Answer to the question “Which risks to you generally ascribe to open data?” from our survey of civil society organizations.*

Claudia Juech, who leads the Government Innovation program at Bloomberg Philanthropies and previously held senior positions at US-based foundations specializing in non-profit data applications and data science methods, notes:

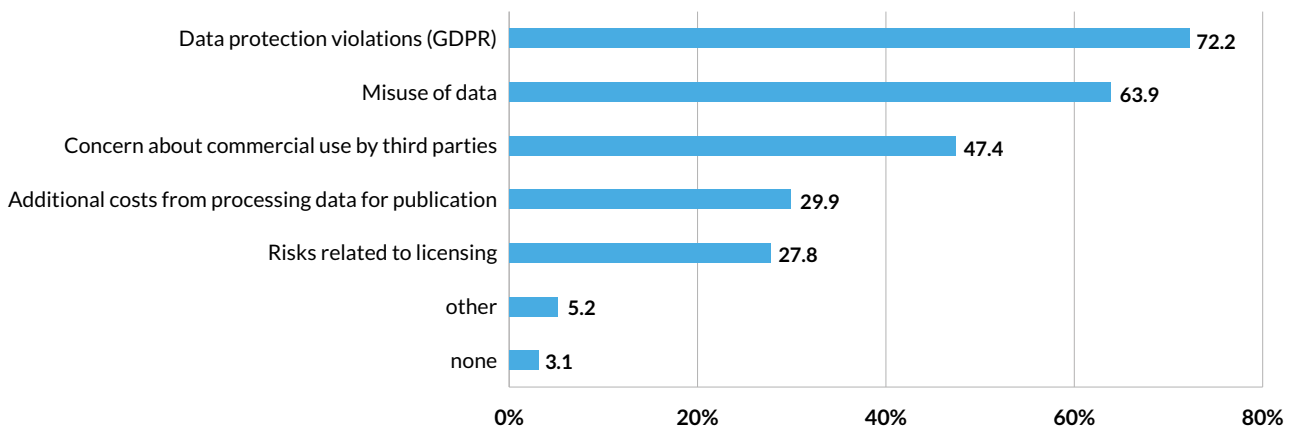
**FIGURE 8 In your organization, is publishing data associated more with opportunities or risks?**



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung

FIGURE 9 Which risks do you generally ascribe to open data?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung

*“The bar for ethical data use has rightly been set higher for non-profit organizations, which means they are often hesitant to even consider opening up their data. Data usage capacity is generally low, making supply and demand difficult, and the quality of the data – at least on the international level – often leaves much to be desired and is not always suitable for drawing reliable conclusions.”<sup>21</sup>*

## Common fears

The debate about open data is often accompanied by a number of fears and counter-arguments. The following critically examines the most common reasons for not making data openly available.

### Data protection and privacy

***“I don’t want my personal information to be visible to everyone. What about privacy?”***

*Fear: Making data openly available harbors the risk of violating privacy and data protection regulations.*

Data protection is undoubtedly a critical aspect that must be considered when open data is published. Open data may not contain any personal information.

### Misuse of data

***“Imagine that someone uses the data to do something illegal. Then we’d all be responsible.”***

*Fear: Open data could be used for unethical or illegal purposes.*

Misrepresentations, fake news and other misuses are possible and unfortunately very real even without open data or any data at all.

### Data quality and accuracy

***“Who can tell me if the data is even correct? Errors have consequences.”***

*Fear: Open data can be incorrect or incomplete, potentially leading to erroneous conclusions or decision-making.*

Publishing data facilitates a sort of “crowd-sourced peer review” in which a broad community of users can check and correct the data. This increases the data’s accuracy and reliability.

<sup>21</sup> Juech 2022.

## Cost

**“Processing the data costs a lot of money. Who’s going to pay for it?”**

*Fear: Making open data available generates costs for data preparation, storage and management.*

Open data should not be seen as a separate element outside of data management. If the latter is lacking, the implementation costs will be higher. The overall calculation – driven by effective data management, which makes open data possible – should take other aspects into account, such as improved decision-making, greater transparency and more innovation.

## Technical challenges

**“I’m not an IT genius. Who’s going to take care of the technology so that everything runs smoothly?”**

*Fear: Sharing and maintaining open data is a technically complex undertaking.*

It is possible to publish open data through technical, cross-organizational partnerships or on platforms such as zenodo.org.

## Competitive disadvantages

**“Why should we share our data? So the competition gets a leading edge?”**

*Fear: It can be disadvantageous for organizations to disclose their own data.*

Those who support and fund research are increasingly requiring that scientific publications and data must be freely available to everyone. This open-access policy promotes transparency, facilitates the review of research findings and fosters the shared use of knowledge in order to avoid duplicate efforts and drive scientific developments forward.

## Loss of control

**“We’ll lose control of our data.”**

*Fear: Publishing data could mean losing the ability to provide a definitive narrative of what the data means.*

The opposite is more likely: If data is broadly accessible, a large number of specialists can review and interpret it, which increases its quality and credibility. The originator of the data can continue to participate in this ongoing discussion, maintaining or expanding their narrative.

## From skepticism to acceptance: recognizing the opportunities open data offers

The bar for publishing and using data ethically in civil society is high. The same applies, however, in the area of public administration, where the number of municipalities that release open data is growing steadily. Concerns about data protection or misuse continue to be raised in some cases, but the lived practice of public administrators in hundreds of institutions at all levels (federal, state, local) and updated legislation in the form of open-data and transparency laws have increasingly reduced fears in many places (albeit not everywhere).<sup>22</sup>

There is generally a high level of sensitivity in German organizations to the topic of privacy. This might be attributable to the deeply rooted and institutionalized concern for data protection found in the structures of larger organizations in Germany.

The concept of open data expressly excludes personal data. And should personal data be of interest, possibilities exist for anonymizing or pseudonymizing it. In addition to data protection, it is often argued that data could be (politically) misused by unintended actors. However, this is already possible under current conditions without open data. Data taken from public statistics, for example, is embedded in other contexts in order to give it a different interpretation. Any civil society organization that publishes open data can and should offer a narrative that allows the data to be appropriately understood.

In our view, the concern that the data might be misused, a concern that has rarely been substantiated, does not outweigh the benefits that are lost when data remains unpublished.

<sup>22</sup> For more information about the status of open data in Germany’s municipalities, see Bürger, Wiedemann and Raffer 2022.

# 7 How can my organization publish open data?

---

The process of making data openly available comprises a number of steps, ranging from identifying and selecting data to legal checks and the actual publication and maintenance of the data (see Figure 10). The following explains the four main phases of this process step by step, giving organizations and individuals structured guidance for successfully publishing open data. Each of these steps involves specific considerations and measures for ensuring that the data not only complies with the relevant legal requirements, but is also made available in a way that ensures its wide, effective use.<sup>23</sup>

## Step 1: Finding data

In the first step of the process, it is essential to conduct a comprehensive inventory of the existing data. In doing so, the following questions should be answered:

- **Find data:** Where and in what format is the data available?
- **Convince decision makers:** Is the data already publicly available? If so, is it necessary to publish it again as open data?
- **Clarify the legal situation:** Would contractual obligations or property rights prevent publication of the data?

This phase is critical for identifying potentially valuable data sources and clarifying proprietorship in order to avoid legal complications later.

## Step 2: Legal review

The second step focuses on the legal framework for using the data:

- **Clarify usage rights:** Do exclusive rights to use the data exist?
- **Review security considerations:** Are there security-related aspects that would preclude the data from being published?
- **Review contracts:** Are there any contractual restrictions that could prevent the data from being published?

This phase is crucial for ascertaining that the data can be published without exposure to legal risks.

## Step 3: Data processing

The third step focuses on the dimension of data protection.

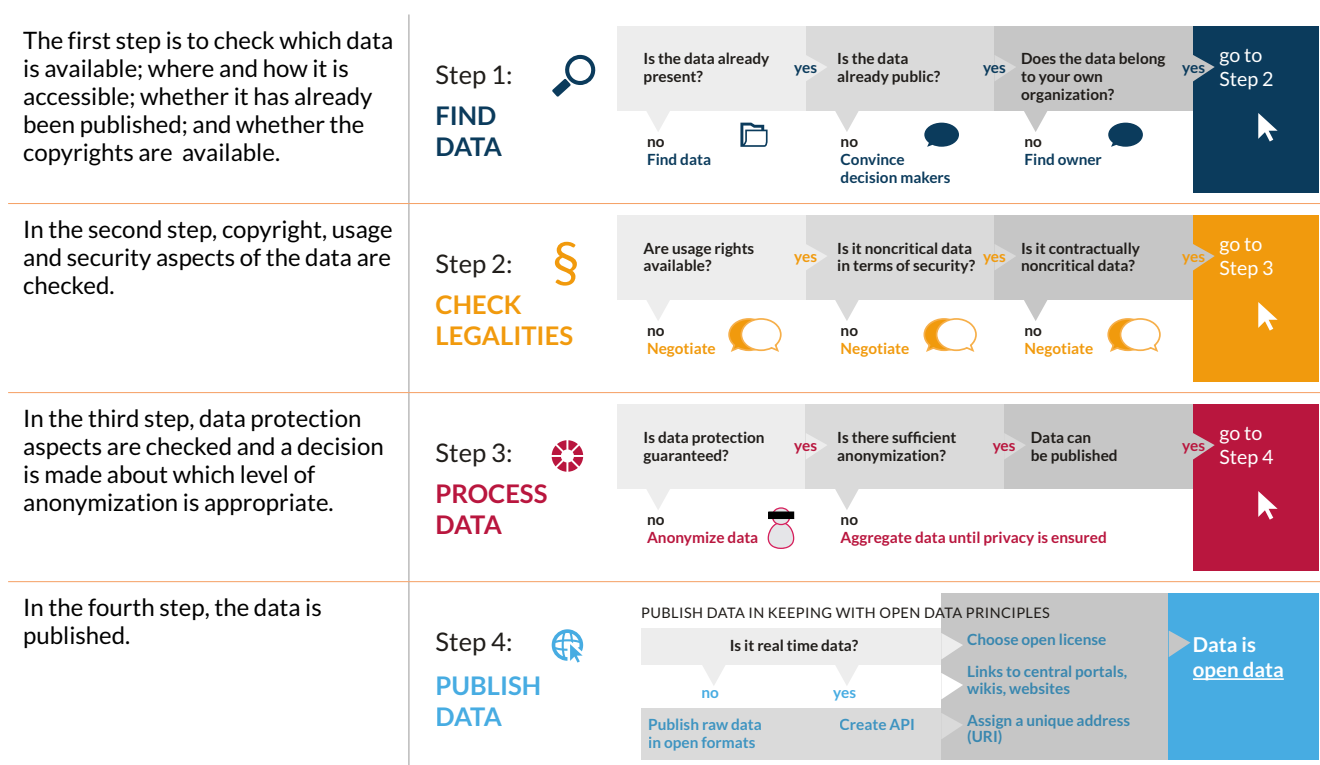
- **Ensure privacy:** Is any personal data included and, if so, how can it be anonymized?
- **Check degree of anonymization:** Is the anonymization sufficient to ensure privacy? If not, the data should be further aggregated.

Once this step is complete, the data should have been processed in such a way that it can be published without violating data protection regulations.

---

<sup>23</sup> For additional in-depth information about publishing open data, see Krabina 2023.

FIGURE 10 Process for checking a dataset



Source: Bertelsmann Stiftung. Based on Openall.info and Krabina and Lutz 2016.

BertelsmannStiftung

## Step 4: Publishing the data

The fourth and final step is the actual publication of the data.

- **Chose data format or mode of publication:** Is it real-time data? If so, an API should be provided. If not, the raw data should be published in open formats such as .json or .csv.
- **Licensing:** If copyright claims and attribution can be waived, choose CC-0, otherwise another open Creative Commons license (CC-BY/CC-BY-SA).
- **Metadata and identification:** The data should be linked on (meta-)data portals and given a unique identifier if necessary.

This step ensures that the data is published in keeping with the Sunlight Foundation's 10 Open Data Principles, to ensure its widest possible use and further processing.<sup>24</sup>

<sup>24</sup> Ten Principles for Opening Up Government Information: <https://sunlightfoundation.com/policy/documents/ten-open-data-principles> (accessed Nov. 9, 2023).

## 8 What can we learn and what comes next?

---

In our digital age, data is an important resource – for analysis, for management and strategy development and, not least, for AI and other applications. And there is no shortage of data. Large platform providers in particular – but other companies as well – collect and use data in their very different business areas. The problem is that this important resource is very unevenly distributed, both in terms of access to it and the ability to use it. Data monopolies hinder innovation, and they limit public control and opportunities for participation.

### What can we learn?

To counteract this, we advocate for a growing and socially responsible data ecosystem and, in particular, for open data. After all, data is not only an economic resource, but also a public good. That open data benefits society as a whole is undisputed: Open data stands for transparency, makes the discourse more factual and helps build an emancipatory information culture. Data can only create value if it is used. A precondition for this use is access that is as low-threshold as possible.

Opening data holdings can proceed in two different directions: On the one hand, it helps break down silos within institutions and promotes an efficient exchange of data. On the other, external data exchange between civil society institutions and initiatives helps to close information gaps and improve the quality of data. The picture we have of society would be incomplete if it were based solely on data from public authorities and the business community.

Our experiences in recent years in the context of public administration have shown that opening data can generate significant added value. There is great potential for open data in civil society as well. Over the past year and a half, we have dialogued with numerous civil society stakeholders at various events and ascertained that there is considerable interest in the topic. This publication is based on many of these discussions and experiences, as well as on specific comments on the text made by numerous people active in the field of open data. This discussion paper only reflects a condensed portion of all the insights gained during the talks and events. When the time is right, we would like to continue discussing many of the ideas and experiences prior to implementing them. Moreover, we want to take the opportunity here to thank all those who participated in these efforts.

### What comes next?

Over the next few months, we at the Bertelsmann Stiftung will continue making a decisive contribution to growing a data ecosystem that benefits the common good. We want to do this together with many different partners from civil society – from within our network and beyond – who are also committed to opening up and making better use of data.

A number of key components for a joint initiative have emerged from the previous discussions, which we believe provide a solid foundation: In addition to the necessary technical infrastructure, there are also the issues of participation and governance. Legal frameworks must be taken into account, along with fund-

**Quote**

*“Our experience working with Berlin’s public administrators shows that for open data to be a success, people and organizations are needed that have an intrinsic motivation to support open data and become active themselves. Only once it becomes clear that open data does not result in added work done for ‘outsiders’ can we raise the quality of the data to a level that makes its use possible. We support the Bertelsmann Stiftung’s initiative and are convinced that, with its clear commitment, implementation will go smoothly and many organizations will follow suit.”*

*Klemens Maget and Lisa Stubert, Open Data Information Center Berlin (Technologiestiftung Berlin)*

ing models and possibilities for capacity building. As a result, there are many different roles and topics that stakeholders can get involved in: existing approaches that can be further leveraged by a larger circle of participants, or new services that can be jointly developed in light of the different thematic focuses and the available resources. Our vision currently consists of a data portal for open data from civil society which, in addition to data use, will at some point address and initiate funding options, capacity building and knowledge transfer.

A diverse data ecosystem is a catalyst for change processes that we need – and want to drive forward – in many areas of society. In the coming months, we will be working on this together with partner organizations in order to strengthen civil society and move it forward in its role as a data user and provider.

We look forward to feedback, ideas, criticism and, above all, many committed supporters.

Would you like to contribute your expertise on data and open data to our initiative? Do you work at a funding organization that can provide micro-grants, for example, to smaller non-profits that want to make data openly available? Do you work at an organization that could contribute its own human or financial resources to building the data ecosystem described above? Or do you work at an organization that wants to publish open data itself, and can you imagine participating in events in which civil society stakeholders collaborate to unlock more potential from their existing data? Then we would be glad to hear from you!

You can find the relevant contact person in the Bertelsmann Stiftung team here:

<https://www.bertelsmann-stiftung.de/en/our-projects/data-for-society>

## 9 References

---

- Bundesregierung, Die (2023). Fortschritt durch Datennutzung. Strategie für mehr und bessere Daten für neue, effektive und zukunftsweisende Datennutzung. [https://www.bmwk.de/Redaktion/DE/Publikationen/Digitale-Welt/fortschritt-durch-datennutzung.pdf?\\_\\_blob=publicationFile&v=10](https://www.bmwk.de/Redaktion/DE/Publikationen/Digitale-Welt/fortschritt-durch-datennutzung.pdf?__blob=publicationFile&v=10) (accessed Sept. 12, 2023).
- Bürger, Tobias, Mario Wiedemann and Christian Raffel (2022). Kommunalbefragung Open Data 2022. Bertelsmann Stiftung, ed. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/kommunalbefragung-open-data-2022> (accessed Sept. 18, 2023).
- Hauser, Nina, and Petra Klug (2023). Datendialog mit CorrelAid in Berlin. <https://www.bertelsmann-stiftung.de/en/our-projects/data-for-society/project-news/data-dialogue-with-correlaid-in-berlin> (accessed Sept. 28, 2023).
- International Aid Transparency Initiative (2024). How do I use IATI data? <https://iatistandard.org/en/using-data/how-to-use-iati-data/> (accessed Sept. 7, 2023).
- Juech, Claudia (2022). Gesellschaftlicher Mehrwert von Open Data aus der Zivilgesellschaft. [https://www.bertelsmann-stiftung.de/fileadmin/files/Juech\\_Impuls\\_Mehr\\_Open\\_Data\\_aus\\_der\\_Zivilgesellschaft\\_221108.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/Juech_Impuls_Mehr_Open_Data_aus_der_Zivilgesellschaft_221108.pdf) (accessed Sept. 12, 2023).
- Klimpel, Paul (2012). Folgen, Risiken und Nebenwirkungen der Bedingung „nichtkommerziell – NC“. Wikimedia Deutschland, ed. [https://irights.info/wp-content/uploads/userfiles/CC-NC\\_Leitfaden\\_web.pdf](https://irights.info/wp-content/uploads/userfiles/CC-NC_Leitfaden_web.pdf) (accessed Sept. 18, 2023).
- Krabina, Bernhard (2020). Ein Leitfaden für offene Daten. Bertelsmann Stiftung, ed. Gütersloh. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/ein-leitfaden-fuer-offene-daten> (accessed Nov. 9, 2023).
- Krabina, Bernhard (2023). Offene Daten der Zivilgesellschaft: Ein Leitfaden für die Praxis. Bertelsmann Stiftung, ed. Gütersloh. <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/offene-daten-der-zivilgesellschaft> (accessed Nov. 20, 2023).
- Nesta (2015): Data for Good. How big and open data can be used for the common good. <https://media.nesta.org.uk/documents/dataforgood.pdf> (accessed Sept. 11, 2023).
- Open Data Institute (2019): Data Ethics Canvas. <https://theodi.org/insights/tools/the-data-ethics-canvas-2021/> (accessed Sept. 11, 2023).
- Schubert, Peter, Birthe Tahmaz and Holger Krimmer (2023). ZiviZ-Survey 2023: Methodenbericht. Hrsg. ZiviZ im Stifterverband. Berlin. [https://www.ziviz.de/sites/ziv/files/ziviz-survey\\_2023\\_methodenbericht.pdf](https://www.ziviz.de/sites/ziv/files/ziviz-survey_2023_methodenbericht.pdf) (accessed Sept. 20, 2023).
- Stiffman, Eden (2023) 'The Single Best Tool for Forcing Public Scrutiny': New Collaboration to Expand Access to Nonprofit Data. [https://www.philanthropy.com/article/the-single-best-tool-for-forcing-public-scrutiny-new-collaboration-to-expand-access-to-nonprofit-data?utm\\_source=Iterable&utm\\_medium=email&utm\\_campaign=campaign\\_7649240\\_nl\\_Philanthropy-Today\\_date\\_20230905&cid=pt&source](https://www.philanthropy.com/article/the-single-best-tool-for-forcing-public-scrutiny-new-collaboration-to-expand-access-to-nonprofit-data?utm_source=Iterable&utm_medium=email&utm_campaign=campaign_7649240_nl_Philanthropy-Today_date_20230905&cid=pt&source) (accessed Sept. 13, 2023).



## Links

Wegweiser Kommune (Community Roadmap):

[wegweiser-kommune.de](http://wegweiser-kommune.de)

Musterdatenkatalog (Sample Data Catalogue):

[musterdatenkatalog.de](http://musterdatenkatalog.de)

Europe Regional Meeting of the Open Government

Partnership: <https://www.opengovpartnership.org/events/europe-regional-meeting/> (accessed Sept. 7, 2023).

IATI Standard: [https://iatistandard.org/en/iati-](https://iatistandard.org/en/iati-standard/)

[standard/](https://iatistandard.org/en/iati-standard/) (accessed Sept. 8, 2023).

The RDF Data Cube Vocabulary: [https://www.w3.org/](https://www.w3.org/TR/vocab-data-cube/)

[TR/vocab-data-cube/](https://www.w3.org/TR/vocab-data-cube/) (accessed Oct. 25, 2023).

Das Kommunale Open-Data-Netzwerktreffen: [https://](https://www.bertelsmann-stiftung.de/de/unsere-projekte/daten-fuer-die-gesellschaft/projektnachrichten/das-kommunale-open-data-netzwerktreffen)

[www.bertelsmann-stiftung.de/de/unsere-projekte/daten-fuer-die-gesellschaft/projektnachrichten/das-kommunale-open-data-netzwerktreffen](https://www.bertelsmann-stiftung.de/de/unsere-projekte/daten-fuer-die-gesellschaft/projektnachrichten/das-kommunale-open-data-netzwerktreffen) (accessed Sept. 28, 2023).

Code for Germany: [https://codefor.de/#:~:text=](https://codefor.de/#:~:text=Code%20for%20Germany&text=Code%20for%20Germany%20ist%20ein,in%20lokalen%20Labs%20und%20online)

[Code%20for%20Germany&text=Code%20for%20Germany%20ist%20ein,in%20lokalen%20Labs%20und%20online](https://codefor.de/#:~:text=Code%20for%20Germany&text=Code%20for%20Germany%20ist%20ein,in%20lokalen%20Labs%20und%20online) (accessed Nov. 9, 2023).

Ten Principles for Opening Up Government

Information: <https://sunlightfoundation.com/policy/documents/ten-open-data-principles/> (accessed Nov. 9, 2023).

# 10 Methodological Profile: Survey on “Open Data and Civil Society”

The survey on “Open Data and Civil Society” reflects the attitudes present in civil society towards open data. Representatives of civil society organizations in Germany were queried by the Bertelsmann Stiftung in July and August 2023. The design of the online questionnaire was based on the ZiviZ survey from 2023<sup>25</sup> and the Bertelsmann Stiftung’s survey of local authorities from 2022.<sup>26</sup> The questionnaire was developed in cooperation with ZiviZ gGmbH. All participating organizations were eligible to win a prize of €1,000 as an incentive to take part.

The invitation to participate in the survey was distributed using snowball sampling via central mailing lists and newsletters from associations and networks. At the end of the field phase, n = 97 organizations had filled out the questionnaire completely. In light of the sampling procedure and the limited response rate, the survey’s results are not representative of the highly diverse civil society organizations present in Germany. To gain a better understanding of possible dis-

tortions, the results on key structural characteristics of the participating organizations (legal forms, fields of engagement, membership figures, etc.) were compared with findings from the representative ZiviZ survey. Given the sampling procedure, however, it can be assumed that primarily organizations were reached that already address the topic of publishing open data or are at least positively disposed towards it. The following observations are central to comprehending the results:

## Observation 1

Although 77.2 percent of the organizations in the “Open Data and Civil Society” survey employ paid staff, only 27 percent of all civil society organizations in Germany do so.

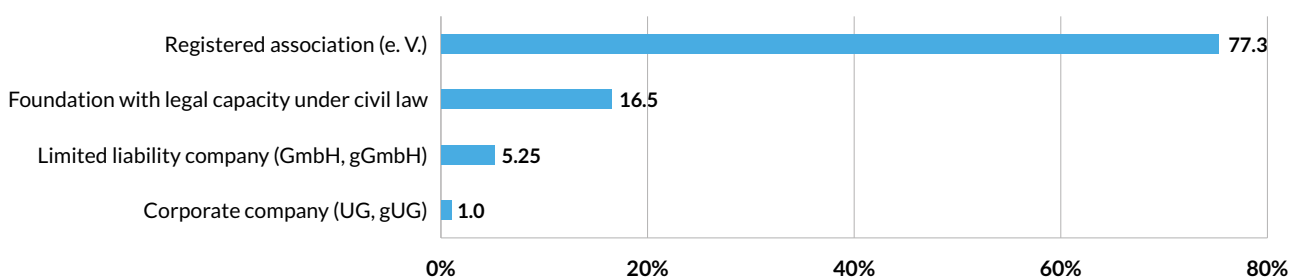
## Observation 2

This is also true of the legal forms exhibited by the organizations. For example, associations are under-rep-

25 Schubert, Tahmaz and Krimmer 2023.

26 Bürger, Wiedemann and Raffer 2022.

FIGURE 11 Which legal form does your organization have?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung

Aspect	ZiviZ Survey 2023 (Source)	Open Data and Civil Society
<b>Population</b>	Registered associations, non-profit corporations, charitable cooperatives, foundations with legal capacity under civil law (651,604 organizations)	
<b>Sample</b>	125,000 organizations Disproportionately stratified random sample Sample stratification by federal state and legal form	Any number of organizations Snowball sampling No sample stratification
<b>Survey method</b>	Quantitative online questionnaire (invitation to participate was sent by post)	Quantitative and qualitative online questionnaire (invitation to participate was sent via newsletter, social media and e-mail)
<b>Response</b>	12,792 organizations	97 organizations
<b>Field phase</b>	August 30 – September 30, 2022	July 1 – August 31, 2023

resented (78.3 percent versus 94.5 percent), while foundations with legal capacity under civil law (15.2 percent versus 2.97 percent) and corporations (6.5 percent versus 2.23 percent) are over-represented (ZiviZ-Survey 2023).

### Observation 3

Also over-represented are the areas of education and social affairs, while the area of sport is under-represented (ZiviZ Survey 2023). Concrete conclusions can already be drawn here: Communications activities on the topic are of crucial importance for the initiative's efforts, as is the recruitment of influential professional first movers in the areas of data and IT.

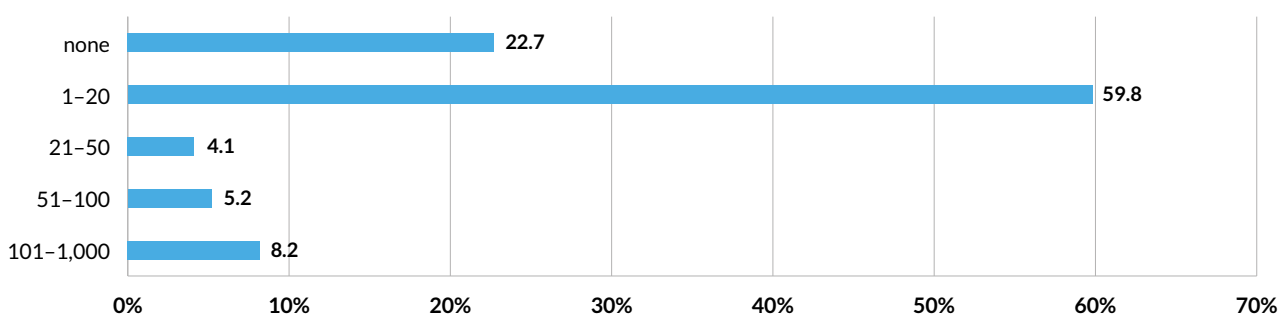
The quantitative and qualitative survey was divided into the following areas:

1. Information on the organization (nine questions)
2. Attitude towards open data (six questions)
3. Open data in the organization (three questions)
4. Information as potential mover (one question)
5. Information as first mover (two questions)
6. Contact (four questions, optional)

The survey's complete findings can be found on the Bertelsmann Stiftung website.<sup>27</sup>

<sup>27</sup> <https://www.bertelsmann-stiftung.de/de/unsere-projekte/daten-fuer-die-gesellschaft/projektnachrichten/ergebnisse-der-umfrage-open-data-und-zivilgesellschaft>

FIGURE 12 How many employees in your organization are paid for their work?



Source: Open Data and Civil Society, surveyed July – August 2023, n = 97

| BertelsmannStiftung

# About the authors

---

**Mario Wiedemann** is a political scientist and heads the Data for Society project at the Bertelsmann Stiftung together with Petra Klug. His work focuses on open data in municipalities and civil society organizations. Before joining the Bertelsmann Stiftung, he was active in projects dedicated to open content, such as free educational materials.

**Damian Paderta** is a web geographer who focuses on the technical and organizational openness of organizations. He has been active in open data communities, such as Offene Kommunen.NRW and Code for Germany, for over 10 years. In his role as digital consultant at Nozilla, he offers extensive services in the areas of digitalization and web development.

**Nina Hauser** studied business analytics at Imperial College London and is a project manager in the Data for Society project, where she is committed to promoting the use of data for the common good. Before joining the Bertelsmann Stiftung, she worked at CorrelAid e. V. to strengthen data literacy in German civil society and supported World Food Programme projects in Tanzania in their monitoring and evaluation activities.

**Petra Klug** studied library and information sciences, German studies, and sociology in Cologne and Duisburg and heads the Data for Society project together with Mario Wiedemann. In her project work, she focuses on the analysis of (open) data as related to demographic developments and data-based management, above all in the context of the [wegweiser-kommune.de](http://wegweiser-kommune.de) data portal.

**Mila Frerichs** has been working with open data for more than 10 years and has turned his volunteer activities into a career. He is now using his many years of experience as a volunteer at Code for America and Code for Germany as a consultant for open data so he can help communities make open data a success. His mission is to fully realize the potential offered by open data.



## Address | Contact

Bertelsmann Stiftung  
Carl-Bertelsmann-Straße 256  
33311 Gütersloh  
Germany  
Telephone +49 5241 81-0  
[bertelsmann-stiftung.de](http://bertelsmann-stiftung.de)

Mario Wiedemann  
Senior Project Manager  
Data for Society  
Telephone +49 5241 81-81305  
[mario.wiedemann@bertelsmann-stiftung.de](mailto:mario.wiedemann@bertelsmann-stiftung.de)