

Some updates on public code in Germany



A summary of recent developments

Motivation

Readers edition
of this slide ;)

- The term “open source” is omni-present in German public administration and politics
- Noone talks about “free software”
- Term “open source”: source code is published, focus on practical benefits
- Term “free software”: empowering aspect, emphasizes freedom of users
- **Hardly any information** on the use of free software in public administration
- Hardly any knowledge in public administration about how the free software model works
- Hardly any statistics on development and use of free software in public administration
- **Impression:** Everyone talks about Free Software, hardly anyone does it.
- A lot is happening right now.
- We desperately need efforts by the administration to achieve **better results** with **fewer resources** through free software and floss software development practices.

Are we FLOSS yet?

State of FLOSS laws and regulations in Germany



13. Prinzip des Servicestandards

June 2020

"The **source code** from the realization of **digital services** (custom-built software) is **made available as open source** [...]"

- Principle 13 of the service standard on the implementation of Germany's "public sector online services act" (OZG)

Non-mandatory. Only 15 out of 221 respondents **give high priority** to the service standard in their own project.

as at 30.03.2022,

https://www.digitale-verwaltung.de/SharedDocs/kurzmeldungen/Webs/DV/DE/2022/03_ergebniss_nutzerrecherche.html

January 2021

Verwaltungsabkommen
zur Umsetzung des Onlinezugangsgesetzes

Obligation from the economic stimulus package:

- "The source code will be **made available as open source wherever possible**"

"The Federal Ministry of the Interior does **not yet keep track** of which services release source code as open source."

-- Minor interpellation in the Bundestag, August 2022

<https://dserver.bundestag.de/btd/20/031/2003140.pdf>



November 2021

"Development contracts are generally commissioned as open source, and the corresponding software is always made public."

- Coalition agreement, German Federal Government

But...

- 4.8 billion EUR investment in proprietary cloud infrastructure + 1.3 billion EUR Microsoft
- <1% investment in open source ecosystem
- Planned financing for ZenDiS (Germany OSPO) cut by nearly half (from 48 to ~24 million EUR)
- Still no FLOSS procurement regulations

Policies in federal states

- Priority for free software if “technically possible and economical”
- In-house developments: Open license, as long as not used for “security-relevant tasks”

May 2018



Thuringia

February 2022



Schleswig-Holstein

FLOSS in practice...

Political objectives are ignored.

Open-washing

„presenting something as open, when it is not actually open“

Open-washing




Technologische Basis: 100 % Open Source ab Version 10

- ✓ Leistungsstarke und voll integrierte Apache Solr-Volltextsuche
- ✓ Social Media-Integration über „Shariff“-Share-Leiste
- ✓ HTML 5 und CSS 3 konform, auf Basis des responsiven Frameworks „Foundation“

The infographic features a central icon of a network or cloud structure within a circle. The text is centered and uses a clean, sans-serif font. The background is a light blue gradient.

HIER GEHTS ZUM [GSB](#).

Für Einrichtungen der Bundesverwaltung ist die Nutzung des [GSB](#) kostenfrei. Auch Behörden in Ländern und Kommunen können mit dem [GSB](#) arbeiten. Hier finden Sie alle Informationen zum Bezug.

 **SO KÖNNEN SIE DEN GSB BEZIEHEN**

The text box has a white background with a light blue border. The text is in a sans-serif font, with the GSB acronym underlined and linked. The arrow icon is a simple line-art style.

🌐 download.gsb.bund.de

Diese Website fordert Sie auf, sich anzumelden.

Benutzername

Passwort

The login form has a dark grey background with white text. The input fields have a light blue border. The buttons are white with blue text.

„based on open source“

Why is that?

Public administration still has little experience...

- ...with **public procurement** of free software
- ...with **releasing own code as free software**

→ little incentives to invest in existing free software

→ little incentives to **release own code** and to **collaborate** on code

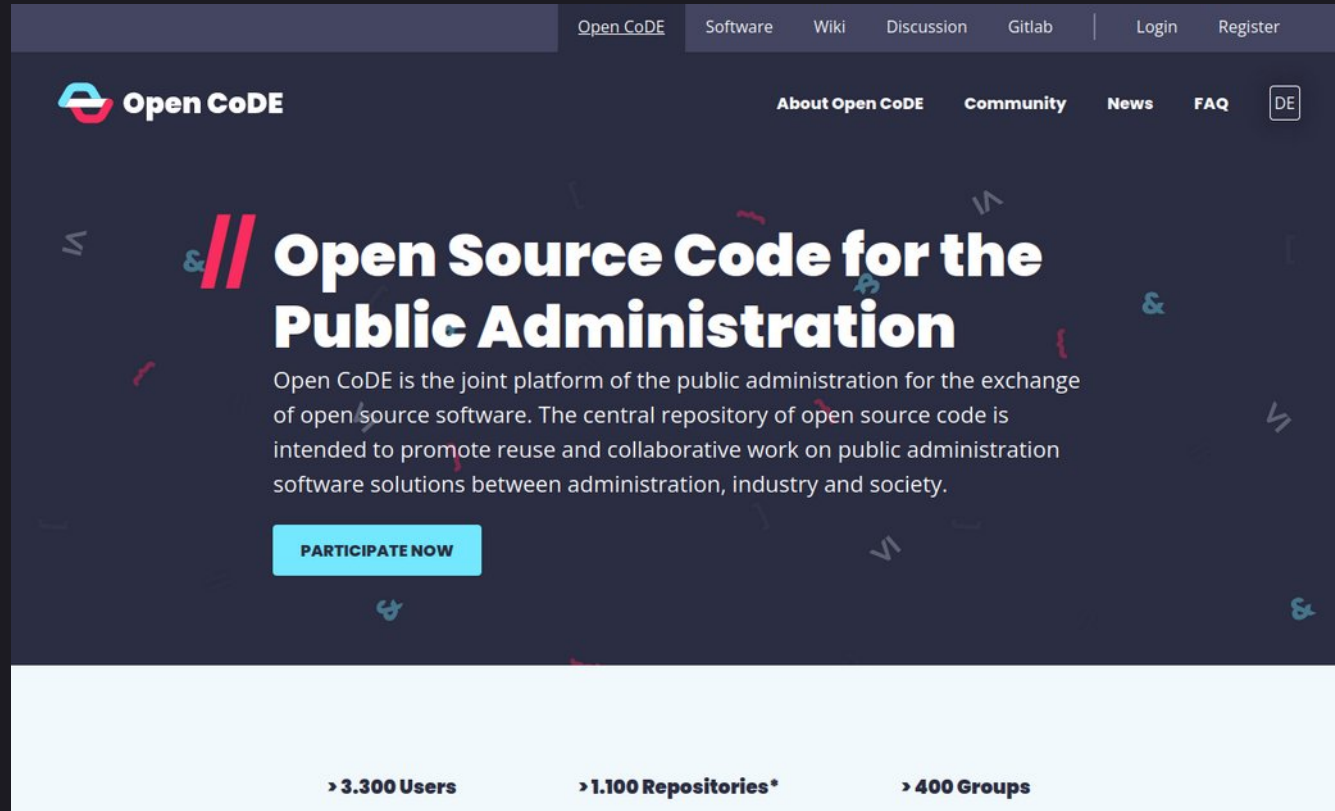
Application of the floss model **still heavily depends on individuals!**



Let's talk about wins!

Germany's OpenCoDE platform

February 2022



The screenshot shows the homepage of the Open CoDE platform. At the top, there is a navigation bar with links for 'Open CoDE', 'Software', 'Wiki', 'Discussion', 'Gitlab', 'Login', and 'Register'. Below this, the 'Open CoDE' logo is on the left, and navigation links for 'About Open CoDE', 'Community', 'News', and 'FAQ' are on the right. A 'DE' language selector is also present. The main content area features a large heading: 'Open Source Code for the Public Administration'. Below the heading is a paragraph: 'Open CoDE is the joint platform of the public administration for the exchange of open source software. The central repository of open source code is intended to promote reuse and collaborative work on public administration software solutions between administration, industry and society.' A blue button labeled 'PARTICIPATE NOW' is positioned below the text. At the bottom of the page, three statistics are displayed: '> 3.300 Users', '> 1.100 Repositories*', and '> 400 Groups'.

Open CoDE

Open CoDE

Software Wiki Discussion Gitlab Login Register

About Open CoDE Community News FAQ DE

// Open Source Code for the Public Administration

Open CoDE is the joint platform of the public administration for the exchange of open source software. The central repository of open source code is intended to promote reuse and collaborative work on public administration software solutions between administration, industry and society.

[PARTICIPATE NOW](#)

> 3.300 Users > 1.100 Repositories* > 400 Groups



publiccode.yml

Germany got an OSPO!

December 2022



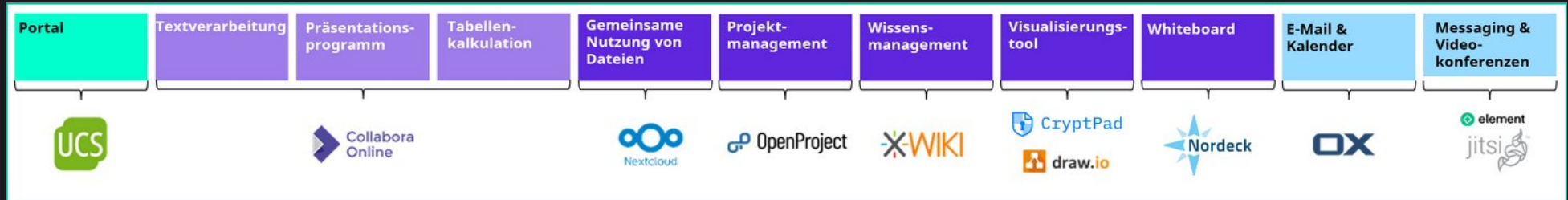
Zentrum Digitale Souveränität

IT is a public good

Open Desk

open**Desk**

Der Souveräne Arbeitsplatz




<https://gitlab.opencode.de/bmi/opendesk>

KoliBri

KoliBri - Public UI

Die barrierefreie Web Component Bibliothek

Get Started - 5min 

Dokumentation



Barrierefreier Standard


<https://github.com/public-ui>


thek für die Barrierefreiheit" und wurde vom
zur Wiederverwendung und Weiterentwicklung freige-
geben.



KERN Design System



KERN – Fach-Community 

Project ID: 803  [Request Access](#)



☆ Star

5

🍴 Fork

0

Topics: [Design System](#) [Barrierefrei...](#) [Webcomponent](#) + 2 more

Community-Arbeit rund um den KERN UX-Standard: Informationsaustausch, Planung und Durchführung von Treffen/Workshops/Konferenzen mit Interessierten und Aktiven.

Quicklinks:

- **Aktuell:** [neues Diskussionsforum](#)
- [Produktvision](#)
- [Unsere Werte](#)
- [Warum eigentlich Fach-Community und wie beteiligen?](#)
- [Code of Conduct](#)

Herzlich Willkommen in der KERN Fach-Community!

<https://gitlab.opencode.de/kern-designsystem>

! könnt ihr euch jetzt im **KERN**
; Deutschland zum Thema UX-

tzer:innenzentrierte digitale

Verwaltungslösungen effizient zu entwickeln. Dies gelingt nur zusammen mit einer länderübergreifenden KERN Fach-Community, die von der Kommunal-

opensource.muenchen.de

Munich Open Source

[Home](#) [Use](#) [Improve](#) [Publish](#) [Overview](#) [Principles](#)

🌐

☰

🔄



Landeshauptstadt
München

Munich Open Source

More transparency from our IT

Discover the open source projects developed, commissioned or sponsored by the City of Munich.



Use

The Free Software ecosystem offers



Improve

Not all free software can be used



Publish

If we cannot use or improve existing free

National Documentation Portal

Das Föderale Entwicklungsportal

Willkommen im Föderalen Entwicklungsportal, dem zentralen Ort für technische Dokumentation, Entwicklungsressourcen und Implementierungsbeispiele zu Standards und Schnittstellen der föderalen IT-Infrastruktur von Bund und Ländern.

[Zu den Entwicklungsressourcen](#)



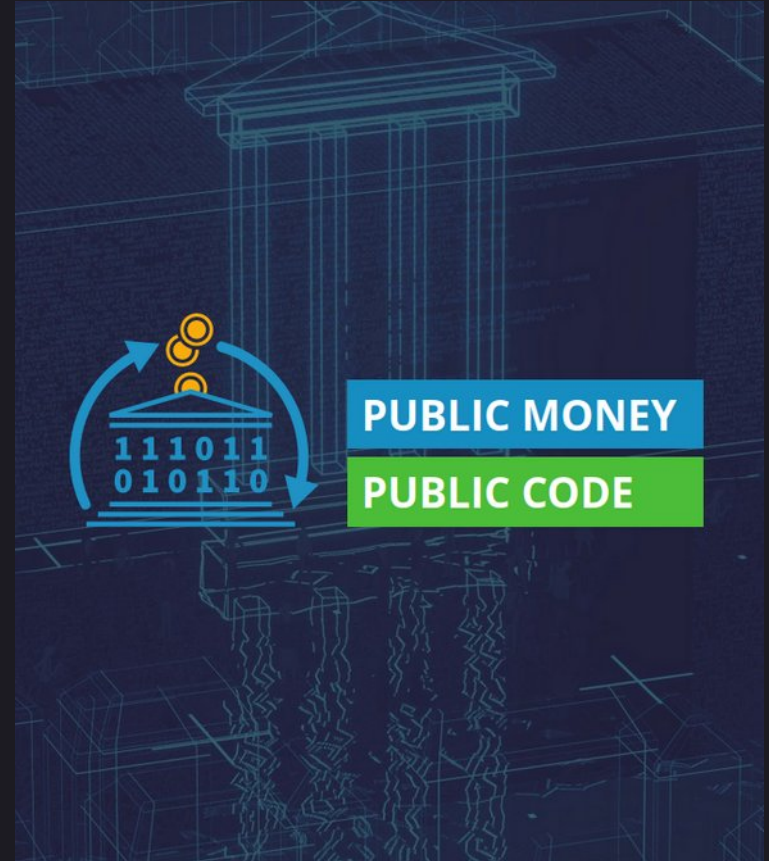
<https://docs.fitko.de>



What does it take for free software
to **become the standard** in
public authorities?

Challenge 1/3

- Release custom-built software
 - **regulation** is very important here
 - **FLOSS knowledge and skills** need to be built up in the administration



<https://publiccode.eu>

Challenge 2/3

- FLOSS software procurement
 - spending money on Free Software related services needs to become easier
 - procurement law needs a reform



“10 % of hosting fee has to be re-invested into development of software + components (according to SBOM)”



Challenge 3/3

- Statistics on Free Software
 - there are hardly any statistics on free software
 - mandatory use of a searchable software catalog would help

The screenshot displays the 'Software' section of the Developers Italia website. The page features a blue header with the site's logo and navigation links. Below the header, there are tabs for 'Platforms', 'Software', and 'Interoperability'. The main content area is titled 'Software' and includes a description of the open source catalogue. It lists 'Most recent software' and 'Most active projects' with various software icons and brief descriptions. The 'Most virtuous administration' section at the bottom shows logos for regional and national government bodies. The footer contains contact information and social media links.

Departmento per la Trasformazione Digitale - AGID
Three-year Plan
Developers
Diagrams
Forum
Docs
GitHub
ENG

Follow us on [social media icons]

How to use it | Get involved | News | Contacts

Platforms | Software | Interoperability

Software

The open source catalogue at the Public Administrations disposal.

This is the catalogue envisaged by the Guidelines for Software Acquisition and Reuse, which includes the solutions put into reuse by the Public Administration in accordance with the art. 69 and the third party open source software meant for PAs.

[More information](#) [FAQ](#)

Most recent software

[SHOW ALL](#)

- LibreOffice**
LibreOffice is a powerful free and open source office suite.
[READ MORE](#)
- GlobaLeaks**
GlobaLeaks is free, open source software enabling anyone to easily set up and maintain a secure whistleblowing platform.
[READ MORE](#)
- IO**
IO è l'app dei servizi pubblici.
[READ MORE](#)
- E-Recruitment**
The system manages all the phases of a public call, from the publication, to the presentation of the applications.
[READ MORE](#)

Most active projects

[SHOW ALL](#)

- NextCloud Server**
Una casa sicura per tutti i tuoi dati.
[READ MORE](#)
- OpenProject**
OpenProject is the leading open source project management software.
[READ MORE](#)
- Audacity**
Free, open source, cross-platform audio software.
[READ MORE](#)
- IO**
IO è l'app dei servizi pubblici.
[READ MORE](#)

Most virtuous administration

[SHOW ALL](#)

- Regione Piemonte**
[READ MORE](#)
- UNIVERSITA' DELLA CALABRIA**
[READ MORE](#)
- Regione Emilia-Romagna**
[READ MORE](#)
- Presidenza del Consiglio dei Ministri**
[READ MORE](#)

DIPARTIMENTO PER LA TRASFORMAZIONE DIGITALE
AGID Agenzia per l'Italia Digitale
Follow us on [social media icons]

Privacy policy | Terms and conditions | Dashboard



Offene Verwaltung

Ressourcen zur Nutzung von Freier und Open-Source-Software in der öffentlichen Verwaltung.

Warum Freie Software / Open Source?

Die öffentliche Verwaltung ist in ihrem Handeln an den Grundsatz der Wirtschaftlichkeit gebunden. Bei der Entwicklung von Software konkurrieren Behörden i.d.R. nicht untereinander, sondern können von ihren Bemühungen gegenseitig profitieren. Freie und Open-Source-Software-Lizenzen bilden einen standardisierten Rahmen für eine gemeinsame, wirtschaftliche Nutzung und Entwicklung von Software durch Behörden, Zivilgesellschaft und Industrie. Durch den Erwerb und Einsatz von Freier und Open-Source-Software reduziert die Verwaltung Abhängigkeiten zu einzelnen Unternehmen (sog. „Vendor Lock-In“). Behörden können sich durch Veröffentlichung von oder Mitarbeit an Freier und Open-Source-Software einen guten Ruf erarbeiten, was sich nicht zuletzt auch positiv auf die Bestrebungen zur Gewinnung von talentierten Fachkräften auswirken kann.

<https://codeberg.org/opengovtech/foss-verwaltung>

intergründen und

mmunen – Ein

Baustein für mehr Digitale Souveränität: Bericht der kommunalen Gemeinschaftsstelle für Verwaltungsmanagement (KGSt)

◦ Ankündigung von Do-FOSS dazu

- Strategische Marktanalyse zur Reduzierung von Abhängigkeiten von einzelnen Software-Anbietern ("Microsoft-Studie") des BMI
- Dokumentation Software-Rebellen - Die Macht des Teilens (ARTE)

Thanks for listening!



@marco@darmstadt.social



@marcoh___:tchncs.de



#egov-de:tchncs.de

Usage and development of free software in governments

A) re-use existing
free software

B) release own code
as free software

A) re-use existing free software



“10 % of hosting fee has to be **re-invested** to software **development**”



administration uses free software and **contributes back**

“free software model”



public administration uses proprietary software
vendor lock-in

Administration *uses* free software

no vendor lock-in

B) custom-built software



More infos about German government IT

awesome-egov-de

A curated list of resources on e-government in Germany.

Pull requests and feedback via issues welcome! Get in touch via the [matrix](#) chat at [#awesome-egov-de:tchncs.de](#)

Communities

Places to ask questions and find other community resources.

- [eGov AfterWork meetup](#): monthly meetup of the [eGovernment Podcast](#) community
 - [Matrix chat](#)
 - [Twitter](#)
- [N3GZ Nachwuchsnetzwerk Digitale Verwaltung](#): junior network for people working in public administration, industry and science
 - [eGov-Wiki](#)
 - [mailing list](#)
 - [Twitter](#)
- [Code for Germany](#): civic tech open government network
 - [Twitter](#)
- [bund.dev](#): civic tech community that documents government APIs

opengovtech.de

publiccode.yml

☰ README.md

The publiccode.yml Standard

A metadata description standard for public software that is easy to use both for developers and people with less technical background in order to make the software developed by Public Administrations and Public Organisations easily discoverable.

[release v0.3.0](#) [Slack channel #publiccode](#) [slack.get invite](#)

[Charter](#) | [Voting procedure](#) | [Contributing](#)

What this file is for

Many great software projects are developed by public administrations, however reuse of these projects is very limited. Some of the reasons for low uptake of such projects is a lack of discoverability and that it is hard to find out what project can actually work in the context of a different public administration.

The `publiccode.yml` file is meant to solve all those problems. It is an easily readable file for civil servants that are trying to figure out whether a project will work for them, and easily readable by computers as well. It contains information such as:

- the title and description of the project in English and/or other languages;
- the development status, e.g. `concept`, `development`, `beta`, `stable`, `obsolete`;
- which organisation developed the project;
- who is caring for the maintenance and when this expires;
- who to contact for technical or support inquiries;
- what national and local legal frameworks the project is designed for;
- what software dependencies the project has.

Code Blame 70 lines (65 loc) · 1.86 KB

Raw Copy Download Edit View

```
1 # This repository adheres to the publiccode.yml standard by including this
2 # metadata file that makes public software easily discoverable.
3 # More info at https://github.com/italia/publiccode.yml
4
5 publiccodeYmlVersion: '0.2'
6 categories:
7   - document-management
8   - digital-citizenship
9 dependsOn:
10  open:
11    - name: JsonForms
12      optional: false
13      version: ''
14      versionMax: ''
15      versionMin: 2.5.0
16 description:
17  it:
18    features:
19      - QR code generation
20 genericName: Web form suite
21 longDescription: |
22   FormPA evita l'esperienza dei PDF al cittadino trasformandoli in semplici
23   form WEB
```


publiccode.yml

The screenshot shows a GitHub search interface for the file `publiccode.yml`. The search results are filtered to show 438 files. The left sidebar contains a 'Filter by' section with 'Code' selected, showing 438 results. Below this are sections for 'Repositories' and 'Paths'. The main content area displays a list of repository entries, each with a preview of its `publiccode.yml` file content.

Filter by

- <> Code 438
- 📁 Repositories 0
- 🕒 Issues 0
- 🔗 Pull requests 0
- 💬 Discussions 0
- 👤 Users 0
- More

Repositories

- SITA-RegionePiemonte/CSIAatlante
- tocororo/semantic-turkey
- torakiki/pdfsam
- vaporup/ssh-tools
- zorbaproject/greenpass-turnstile
- More repositories...

Paths

- .github/ISSUE_TEMPLATE/
- APIM/
- _site/
- example/
- version/development/example/
- More directories

438 files (265 ms)


- torakiki/pdfsam · publiccode.yml** (YAML · master)


```
1 # This repository adheres to the publiccode.yml standard by including this
2 # metadata file that makes public software easily discoverable.
3 # More info at https://github.com/italia/publiccode.yml
4
5 publiccodeYmlVersion: '0.2'
6 applicationSuite: PDFsam
7 categories:
```
- vaporup/ssh-tools · publiccode.yml** (YAML · master)


```
1 publiccodeYmlVersion: "0.3.0"
2
3 name: "ssh-tools"
4
5 url: "https://github.com/vaporup/ssh-tools"
6
7 softwareVersion: "1.7"
```
- OS2iot/OS2IoT-docs · Publiccode.yml** (YAML · master)
- CodeForBaltimore/Healthcare-Rollcall · publiccode.yml** (YAML · master)


```
1 publiccodeYmlVersion: "0.2"
2
3 name: Healthcare-Rollcall
4 url: "https://github.com/CodeForBaltimore/Healthcare-Rollcall.git"
5 landingUrl: "https://github.com/CodeForBaltimore/Healthcare-Rollcall"
6 softwareVersion: "1.0.0"
```

publiccode.yml


 **Softwareverzeichnis**

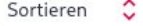
Entwicklungsstand 


Plattform 


Kategorie 

- Abrechnung und Rechnungserstellung
- Buchhaltung
- Agiles Projektmanagement
- Anwendungsentwicklung
- Asset-Management
- Aufgabenmanagement
- Sicherung
- Beschaffung
- Besuchermanagement


OSS-Allowlist 


Suche... 




Open Source Rep.. > 


Open Source Repository




bayernID-Plugin.. > 


Plugin für Keycloak/RH-SSO zur Anbindung der BayernID.




BvC - Kubernete.. > 

IG BvC - Konformitätstest





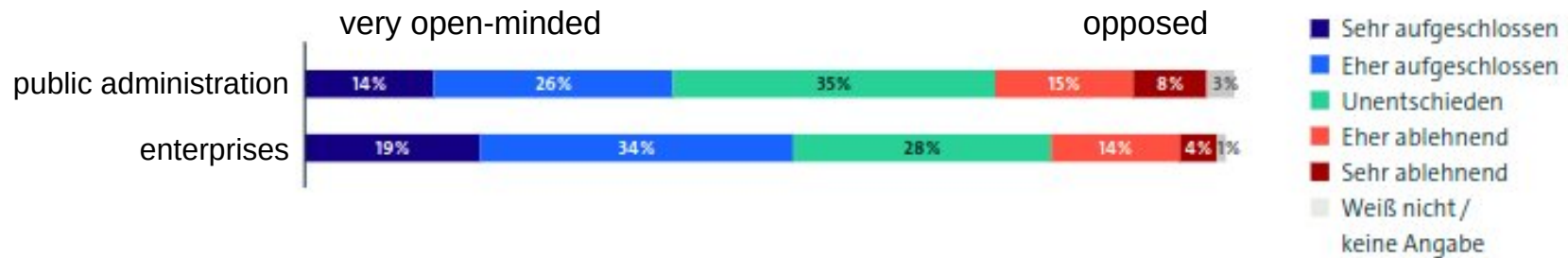


Are we FLOSS yet?

Thoughts about FLOSS in Germany's
administration

What is your organization's / company's general position on OSS?

September 2023

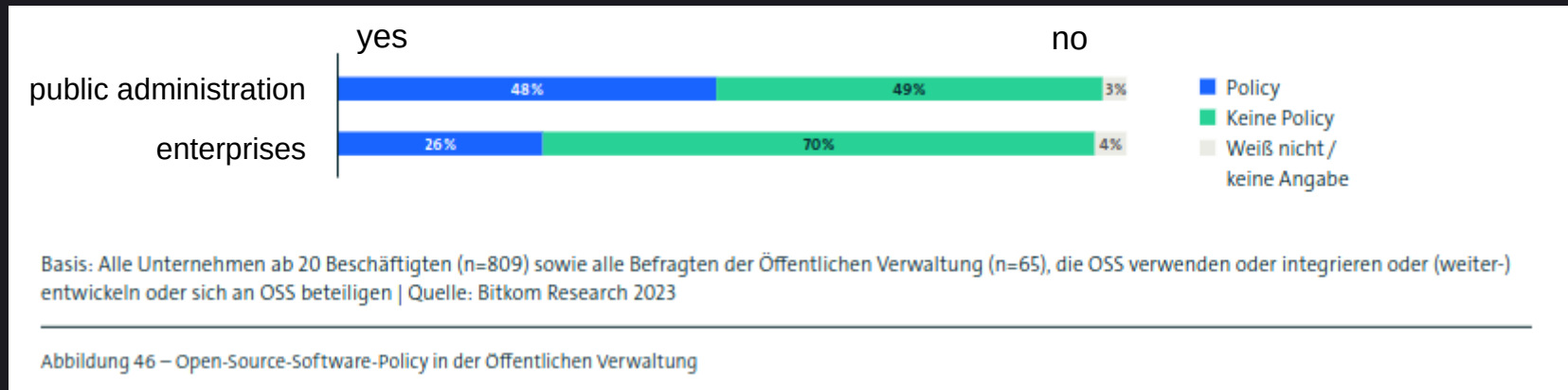


Basis: Alle Unternehmen ab 20 Beschäftigten (n=1.155) sowie alle Befragten der Öffentlichen Verwaltung (n=102) | rundungsbedingt kann die Summe der Prozentwerte von 100 abweichen | Quelle: Bitkom Research 2023

Abbildung 38 – Einstellung zu Open-Source-Software in der Öffentlichen Verwaltung

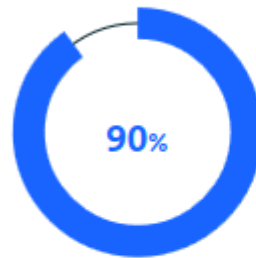
bitkom Open-Source-Monitor 2023

Does your organization / company have an OSS policy?



„It is important that software with a standardized SBOM is delivered.“

Welche der folgenden Aussagen treffen auf Ihre Organisation / Ihr Unternehmen bzw. Ihrer Meinung nach zu?



Es ist wichtig, dass Software mit einer **standardisierten SBOM** ausgeliefert wird.

(Wirtschaft: 66%)

Basis: Alle Unternehmen ab 20 Beschäftigten (n=801) sowie alle Befragten der Öffentlichen Verwaltung (n=60), die OSS verwenden oder integrieren oder (weiter-)entwickeln | Prozentwerte für »Trifft voll und ganz zu« und »Trifft eher zu« | Quelle: Bitkom Research 2023

Abbildung 49 – Aussagen: SBOM Öffentliche Verwaltung