Some updates on public code in Germany

A summary of recent developments

Motivation

- 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

"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_nutzerrecherrche.html

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

"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"

source: E-Government laws Thuringia and Schleswig-Holstein

May 2018

Thuringia

February 2022

Schleswig-Holstein

State of free software law in the EU

FLOSS in practice...

Political objectives are ignored.

Open-washing

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

Open-washing

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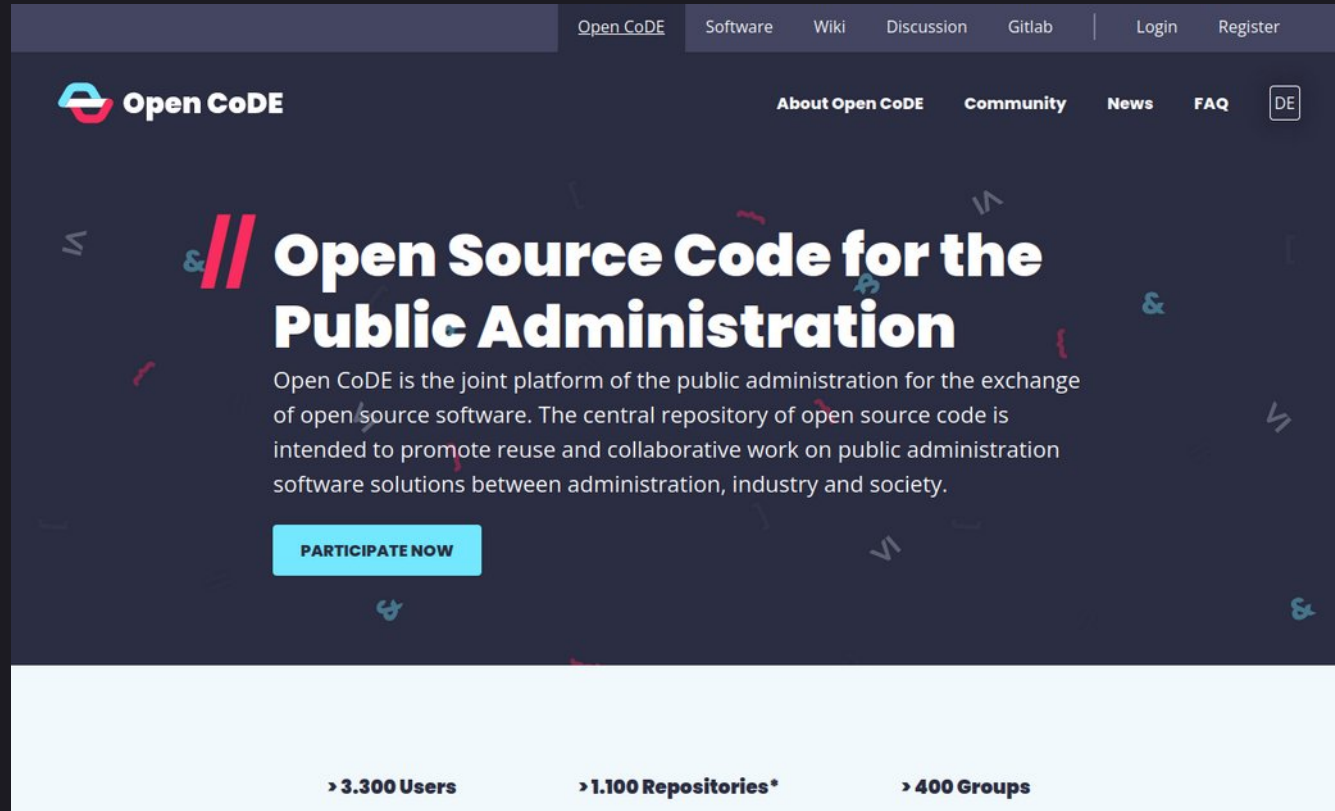
Application of the floss model **still heavily depends on individuals!**

🎂

Let's talk about wins!

Germany's OpenCoDE platform

> 3.300 Users   > 1.100 Repositories*   > 400 Groups

GitLab

Discourse

Wiki.js

`publiccode.yml`

Germany got an OSPO!

Zentrum Digitale Souveränität

IT is a public good

Open Desk
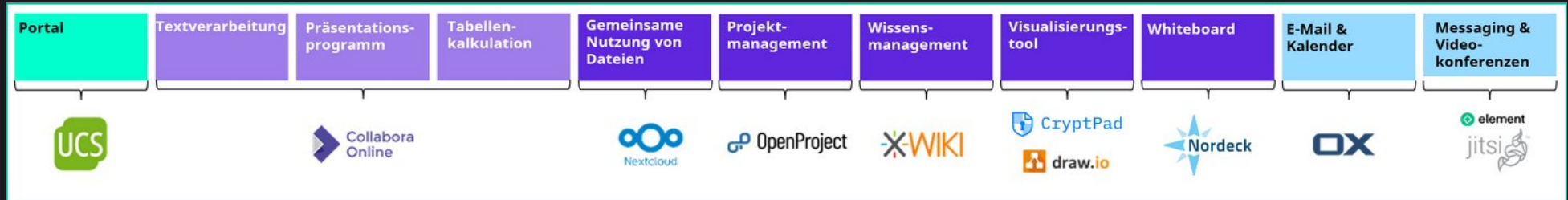
https://gitlab.opencode.de/bmi/opendesk

KoliBri

https://github.com/public-ui

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!

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

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

... 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

IT-Planungsrat

FITKO
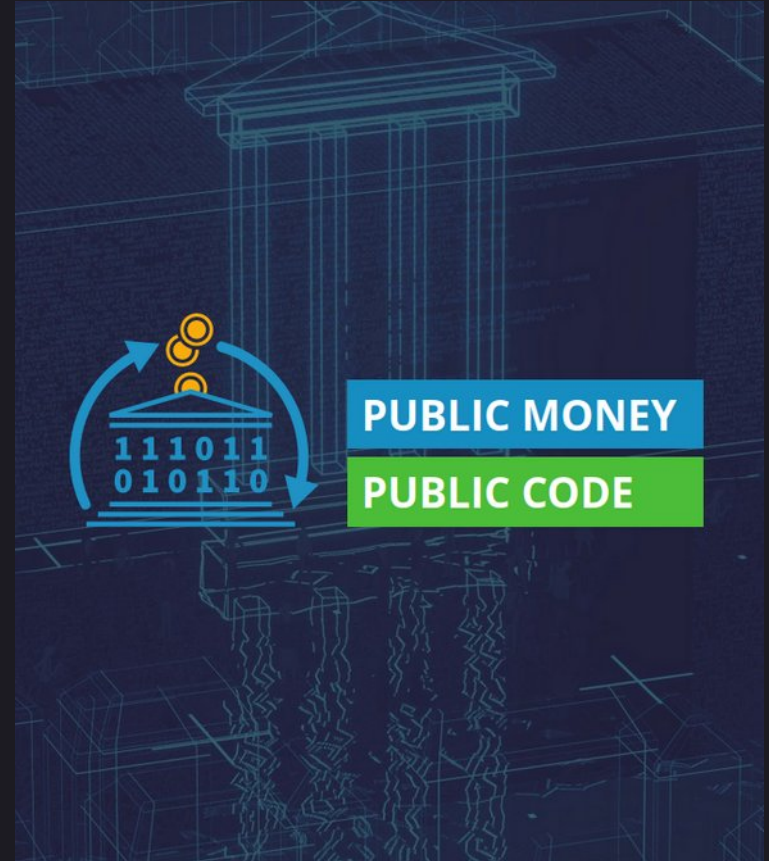Digitale Verwaltung.
Intelligent vernetzt.

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

PUBLIC MONEY
PUBLIC CODE

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)"

Photo by Xavi Cabrera via Unsplash

Challenge 3/3

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

https://developers.italia.it/en/software

opengovtech / foss-verwaltung

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 untereinandern, sondern können von ihren Bemühungen gegenseitig profitieren. Freie und Open-Source-Softwarelizenzen 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

Hintergründen 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 ("Micrsoft-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"

Administration *uses* free software

no vendor lock-in

public administration uses proprietary software

vendor lock-in

B) custom-built software

administration
commissions software
development,
contractor retains full
copyright

„release dumps"

coding in the open

administration claims
full copyright but does
not make use of it

multi-vendor strategy

collaborative
software development

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

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 ⧉ ⬇ ✎ ▾ ⟨⟩

```
 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

publiccode.yml

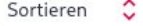**Softwareverzeichnis**

Entwicklungsstand ⌄

Plattform ⌄

Kategorie ⌃

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

OSS-Allowlist ⌄

Suche...

Sortieren ⇕

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?

very open-minded   opposed

	Sehr aufgeschlossen
	Eher aufgeschlossen
	Unentschieden
	Eher ablehnend
	Sehr ablehnend
	Weiß nicht / keine Angabe

public administration: 14% | 26% | 35% | 15% | 8% | 3%

enterprises: 19% | 34% | 28% | 14% | 4% | 1%
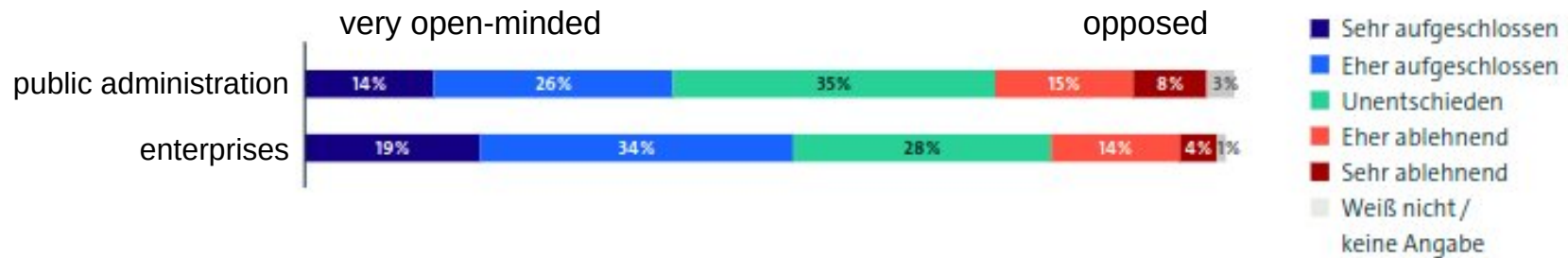
Basis: Alle Unternehmen ab 20 Beschäftigten (n=1.155) sowie alle Befragten der Öffentlichen Verwaltung (n=102) | rundungsbedingt kann die Summe der Prozentwerte von 100 abweichen | Quelle: Bitkom Research 2023

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

bitkom Open-Source-Monitor 2023

source: https://www.bitkom.org/opensourcemonitor2023

Does your organization / company have an OSS policy?

yes   no

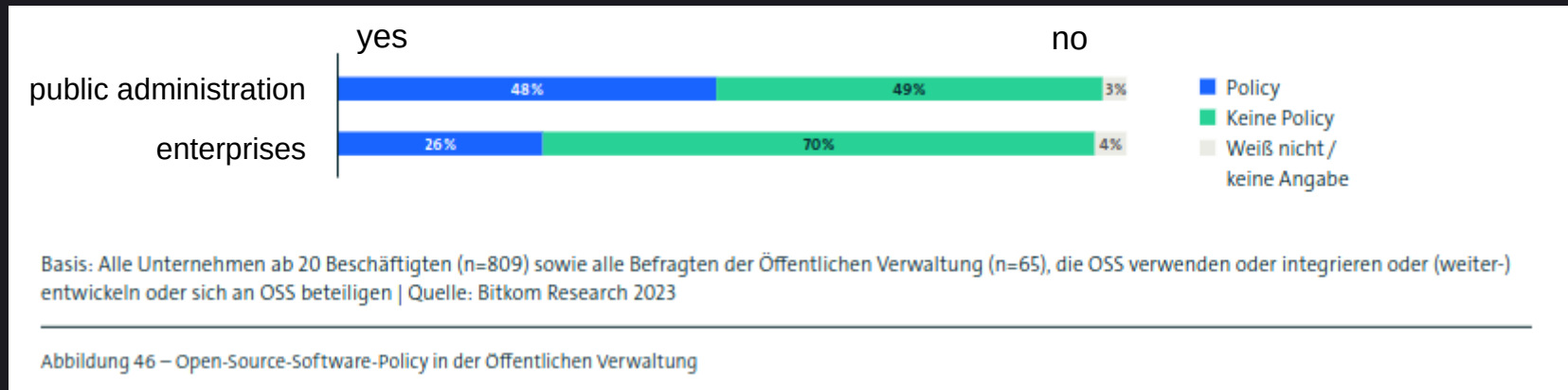|			
public administration	48%	49%	3%
enterprises	26%	70%	4%

- ■ Policy
- ■ Keine Policy
- ▪ Weiß nicht / keine Angabe

Basis: Alle Unternehmen ab 20 Beschäftigten (n=809) sowie alle Befragten der Öffentlichen Verwaltung (n=65), die OSS verwenden oder integrieren oder (weiter-) entwickeln oder sich an OSS beteiligen | Quelle: Bitkom Research 2023

Abbildung 46 – Open-Source-Software-Policy in der Öffentlichen Verwaltung

„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?

90%
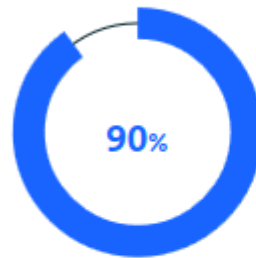
Es ist wichtig, dass Software mit einer **standardisierten SBOM** ausgeliefert wird.

(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