Digital Sovereignty and Open Source in Europe

Valerie Aurora

What is digital sovereignty?

Much of Europe's technological infrastructure depends on foreign technology

"In this context, 'digital sovereignty' refers to Europe's ability to act independently in the digital world." — <u>Digital Sovereignty for Europe</u>

https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/651992/EPRS_BRI(2020)651992_EN.pdf

Includes everything from control of personal data of EU citizens to government infrastructure to commercial innovation in technology

Look at Russia under sanctions to see the effects

Note: this is **NOT** about censorship or government control of information

Current state of digital sovereignty in Europe: Not great!

- 92% of data from the West is hosted in the US and only 4% is stored in Europe
- The core of the digital infrastructure is provided by non-European suppliers
- There are no European companies in the Top 20 of global tech brands

But at least four nations from the EU want to become digitally sovereign

Source: https://www.tno.nl/en/importance-digital-sovereignty/

A little about me: Valerie Aurora

Systems architecture consultant at Bow Shock Systems

American, lived in Silicon Valley for 20 years, moved to Netherlands last year

25 years working on open source software in some way:

- Linux kernel networking and file systems at Red Hat, IBM, Intel, etc.
- ZFS co-designer before it was even open source
- Supporting women in open technology/culture at the Ada Initiative
- Freelance Linux kernel consultant

AMA (Ask Me Anything) about my open source work at the end of this talk

Digital sovereignty and open source in Europe

Governments and the EU are supporting open source software and hardware in a variety of ways, including:

- **Direct funding of open source software** and hardware
- Regulations requiring open source software and data formats
- Promotion of the benefits of open source to the public
- Supporting education in technological fields

Open source software funding accessible to large organizations

<u>Next Generation Internet</u> - Shaping the development of the Internet, including funding for OSS-related work with an "European dimension"

<u>Horizon Europe</u> - EU-wide funding for research and development, including digital, internet, and open source software

<u>Digital Europe Programme (DIGITAL)</u> - EU-wide high level funding

<u>Sovereign Tech Fund</u> - German government funding for the development and maintenance of OSS

Funding accessible to individuals or small organizations

NGI Zero grants via NL.net - Simplified NGI grant process for individuals

<u>Prototype Fund</u> – For individuals or teams living in Germany working on new OSS projects

Open Web Search - For individuals or organizations located in EU & partners

<u>Open Technology Fund Funds</u> - US government funding to support the free and open Internet

<u>RIPE NCC Community Projects Fund</u> - For projects supporting the Internet, preferably supporting the tech community in the <u>RIPE NCC</u> service area

Who is receiving funding

Look at the lists of recipients of funding

- https://www.ripe.net/support/cpf/previous-funding-recipients-2023/
- https://nlnet.nl/thema/NGIZeroCore.html
- https://www.igalia.com/

How RIPE NCC can help you get involved in digital sovereignty

Many people involved in digital sovereignty and open source software attend and present at RIPE meetings

- Open fellowship: https://www.ripe.net/community/ripe-fellowship/
- Academic fellowship: https://www.ripe.net/community/raci/
- Or attend online for free

Join the Open Source Working Group

- Attend OS WG session at RIPE meetings
- Mailing list: https://www.ripe.net/community/wg/active-wg/os/



Questions about digital sovereignty, open source, RIPE?

A few things I've done:

- Linux kernel networking and file systems at Red Hat, IBM, Intel, etc.
- ZFS co-designer before it was even open source
- Supporting women in open technology and culture at the Ada Initiative
- Freelance Linux kernel consultant