

Legal Framework, Licensing and Digital Sovereignty

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EOSA Summer School | 7 September 2026

Introductory comments and thoughts on Open source

- “Software is eating the world” .. and Open Source is “eating” software
- 90% code in new applications is open source (Gartner)
- 2023: GitHub reported having over 100 million developers and more than 420 million repositories, including at least 28 million public repositories
- Open content: more than 5Billion Works available
- Next hot topic: RISC open source hardware
- Now open source AI... Hugging Face has more 3 million open source models

Example Reading: The State of Global Open Source 2025 – Linux Foundation

- https://www.linuxfoundation.org/hubfs/Research%20Reports/2025GlobalSpotlight_Oct-27-2025%20V4.pdf?hsLang=en

Me and why me?

- Lawyer
- IT lawyer
- Open Source IT lawyer

Learning objectives of this session

Understand the legal framework of software development and exploitation

Describe the general concept and requirements for “open source”

Identify and compare the main types of open source licenses

Consider licensing issues and management

Apply open source concepts to other assets: content, data, hardware

Analyse and discuss “open source AI”

Evaluate the role of open source for Digital Sovereignty

Too many!!!

But we have 2 hours (with a break)

Agenda /

Block1

- What is open source?
- What is the legal framework for open source

Block 2

- What is open source licensing?
- What are the issues, challenges
- How does this work with other assets : data, content, hardware, AI?

Block 3:

- What is the role of open source in the debate on “digital sovereignty”

1. Concept and requirements for open source

MAJOR DISCLAIMER:

Open source is NOT about licensing

- Software Development model (or other intangible asset)
- Collaborative organisational model

Licensing is just part of the “infrastructure”

→ But.... licensing is essential as open source is defined in terms of licensing

→ I am a lawyer, cannot talk about other aspects 😊

Legal framework for open source

- IP Protection for software code
 - Patents – maybe available (definitely for hardware specs)
 - Copyrights – core Protection
 - Secrets?
 - Database rights (for AI systems)
- Default rule is “all rights reserved”
 - To share code: must put a license
 - To share code openly, must use an open source license

Conceptual framework - requirements for open source

- Philosophical underpinning: objectives
 - Freedom to choose and use your technology (link with DS)
 - Practicality of open collaboration for software development
 - “Many eyes make bugs shallow”
- Free Software Definition
 - 4 freedoms
- Open Source Definition
 - 10 requirements
- History and evolution

Today: Open everything (see later)

- Software
- Hardware
- Content
- Data
- AI

Advantages open source (legal)

- What you can do with open source
- What is the impact (technical, business, legal)?
- Is there anything you cannot do?

Poll

Question time

2. Open Source licensing

General concepts of software licensing

- Default rule of IP: all rights reserved
- Using, sharing, improving software... needs authorisation
- “License” as a permission and as a contract
- Binary / source code licensing
- Standard traditional / proprietary licensing
- Freeware, Shareware...

Open source licensing 101

- Requirements for free and/or open source licensing (in legal terms)
- FSF: 4 software freedoms
 - Rights to use, improve, share
- OSI: Open source Definition
 - 10 criteria for open source license

Open source licensing 101

- License “classification”
 - Permissive
 - Copyleft in different forms
 - Weak copyleft
 - Strong copyleft
 - Cloud copyleft
- Available source or NC/ND is not open source
- Examples – see next

License examples

- Permissive: MIT, BSD, Apache
- Copyleft: GPL, LGPL, MPL, EPL
- Cloud copyleft. AGPL EUPL
- Topics
 - License versions
 - European Union: EUPL (story and current version)

Organising open source licenses

- See websites
 - FSF
 - OSI
- Issues
 - Internationalisation
 - Fragmentation
 - New technologies / “paradigms”

Practical examples of repositories, projects and their Licenses

- Linux - GPLv2 → “distributions” (corporate, community, etc.)
- Apache communities
 - ANT
 - Spark
 - Ignite
 - hadoop
- Mozilla Projects
 - Firefox
 - Rhino
- Python
 - <https://pypi.org/>
- Package managers
 - <https://www.npmjs.com/>
- Single examples
 - Grafana
 - Hopscotch
 - Puppeteer
 - Localstack

Poll

Question time

First mini break – 5 mns max

3. Other “Open Source” assets

Open Content,

- History and evolution
- Open content concepts and licenses
 - Creative Commons, etc.

Open Data

- Open Data concepts and licenses
 - Creative Commons, ODBL

Open hardware

- OHW as a concept:
 - schematics, specifications, architectures, BoMs, PCB / IC layouts
 - HDL, CAD Files, JSON
 - OSHWA definition (like OSI definition)
 - Not just licensing! E.g. modular design and community collaboration
- Specific licenses for open hardware
 - CERN OHL
 - Solderpad
 - TAPR
- Examples
 - Arduino
 - RISC V
 - CERN Open Hardware

Open Source AI

- OSAID
 - Definition
 - Discussion

Poll

Question time

4. Legal and practical aspects of open source

(Legal and licensing) Issues in open source

- Licensing issues
 - License choice
 - License compatibility
 - License compliance
 - Dual licensing [also see wrt business models]
- IP management
 - Contribution policies
 - Open source Governance
 - Trademark policies
 - AI impacts: AI written contributions

Choosing open source license

- <https://choosealicense.com/>
- <https://interoperable-europe.ec.europa.eu/collection/eupl/solution/licensing-assistant>
- <https://ufal.github.io/public-license-selector/>
- Other
 - Consult a lawyer?
 - Ask the community?
 - Default to MIT 😊
- Resources
 - <https://www.software.ac.uk/guide/choosing-open-source-license>
 - <https://opensource.org/licenses>

License compatibility

Open source contributions

Bringing it together: How to open source your code

- Public repository
- License choice
- IP management
 - Contributions, contribution “policy” and agreements
 - Trademark policies
 - Dependency compliance
- Open Governance
- Don't forget, open source is NOT about licensing: it's about open and collaborative software development

Second mini break – 5 mns max

5. Digital Sovereignty

Digital Sovereignty 101

- Concept and approaches
- Elements
- Technology / digital “paradigms”
 - Binary /Source code
 - On premise
 - Cloud
 - AI

DS and open source

- DS link with open source: access and control over technology
- Ref to EU Commission publication
- How OSS enables DS – happy marriage

Question time

Key take-aways

Key take-aways

- Open source 101
 - Technology paradigm underpinned by license
 - Even OSS license code is not open source if not open source Development
- Licensing 101
 - Legal framework is restrictive by default
 - Need to have a license to share code
 - Different concepts of freedom = different concepts of licenses, from permissive to copyleft
 - Open source licensing for AI: still under debate
- DS 101
 - Open source is major pillar for digital sovereignty



That's it, thanks

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