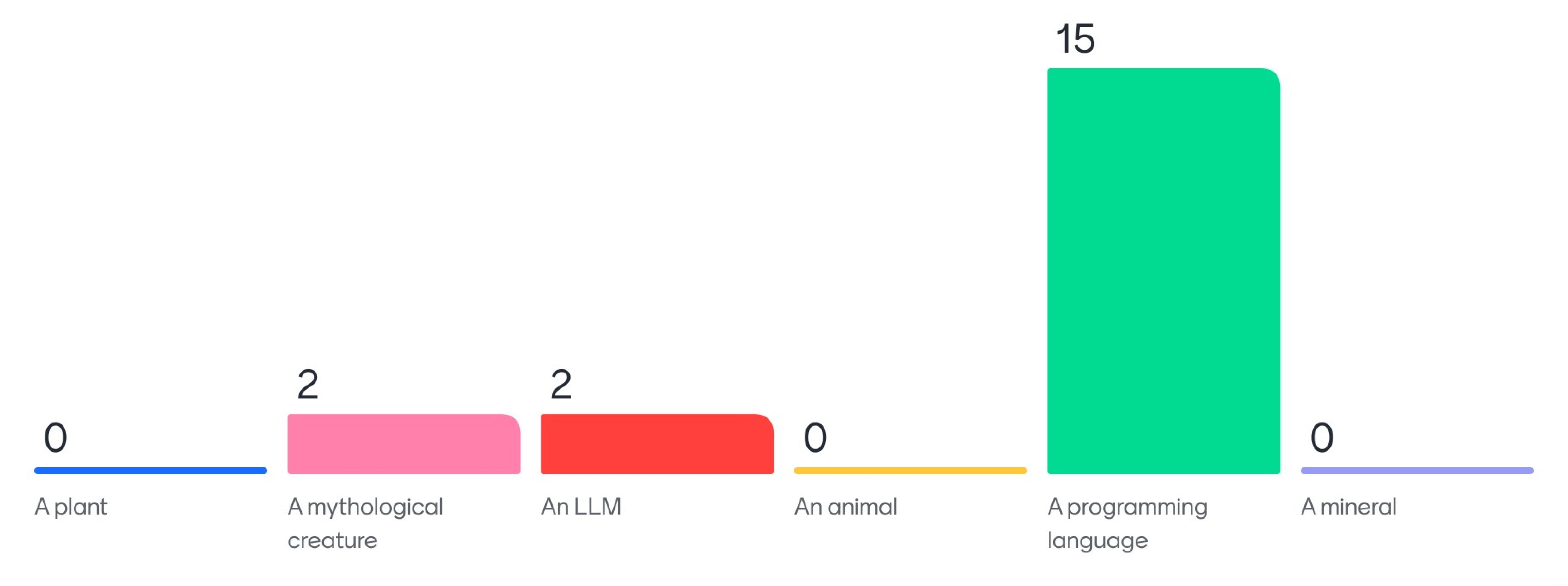


LEGAL MATTERS IN RESEARCH SOFTWARE

A Few Things Worth Discussing

Please join by scanning the QR code

What is OCaml?







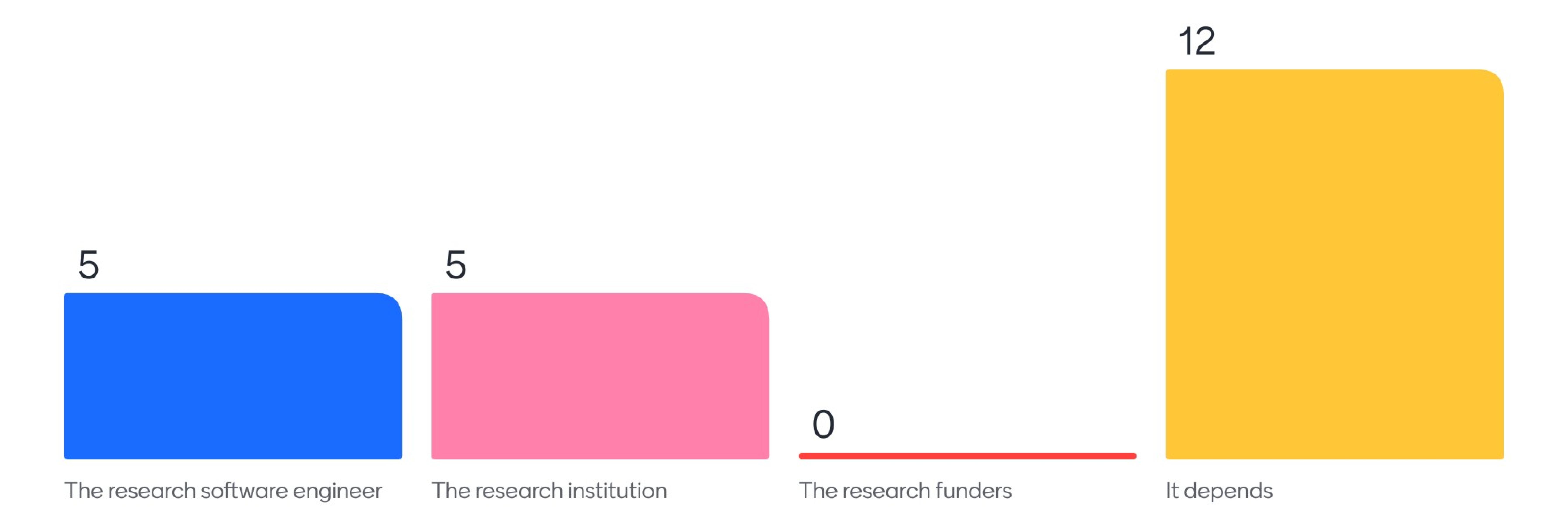
Workshop Structure

- A. Software and Copyright
- → B. Software Licences
- → C. Al, Software, Legal Issues

A. Software and copyright

- 1. Software is intellectual work protected by **copyright**. **Originality** is a requirement to grant copyright protection to software, but the level of creativity required is low. EU Directive 2009/24/EC harmonises the requirements for software copyright protection among the member states in such a way that lack of originality and consequently lack of copyright protection is an exception for software.
- 2. EU member states protect software under copyright law as literary work.
- 3. The copyright holder has both **economic and moral rights**.

Who is the copyright holder of research software?

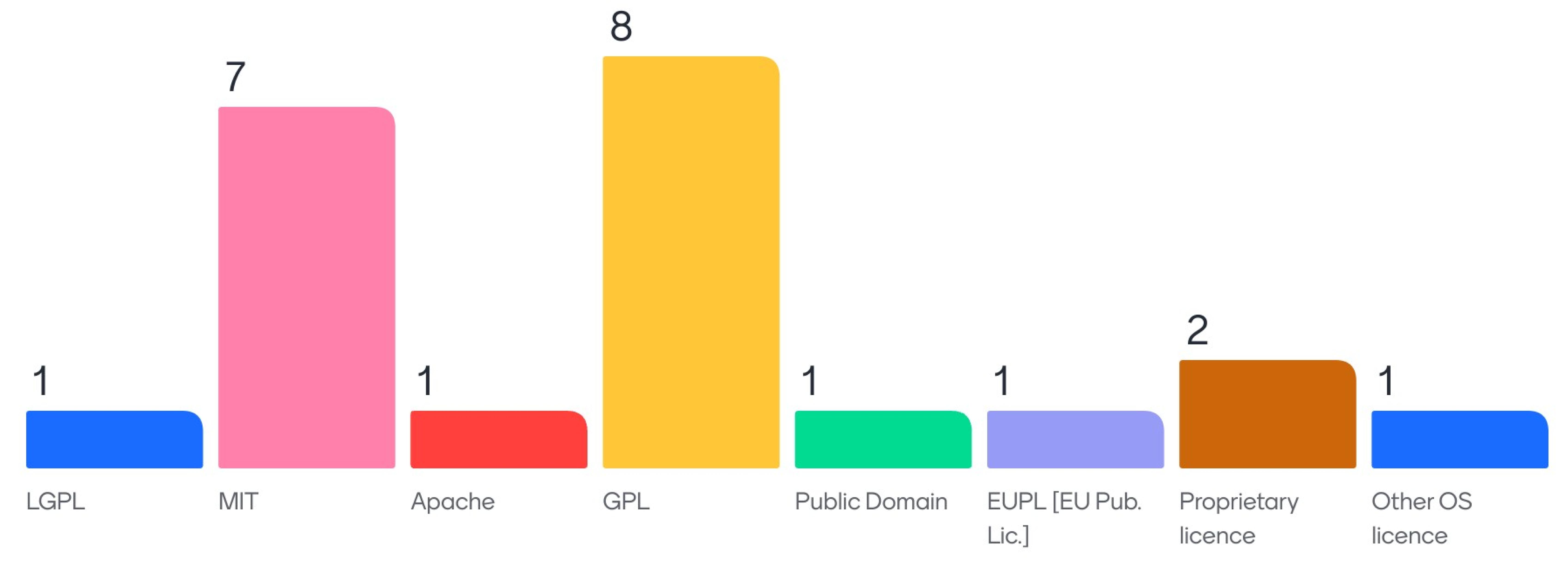




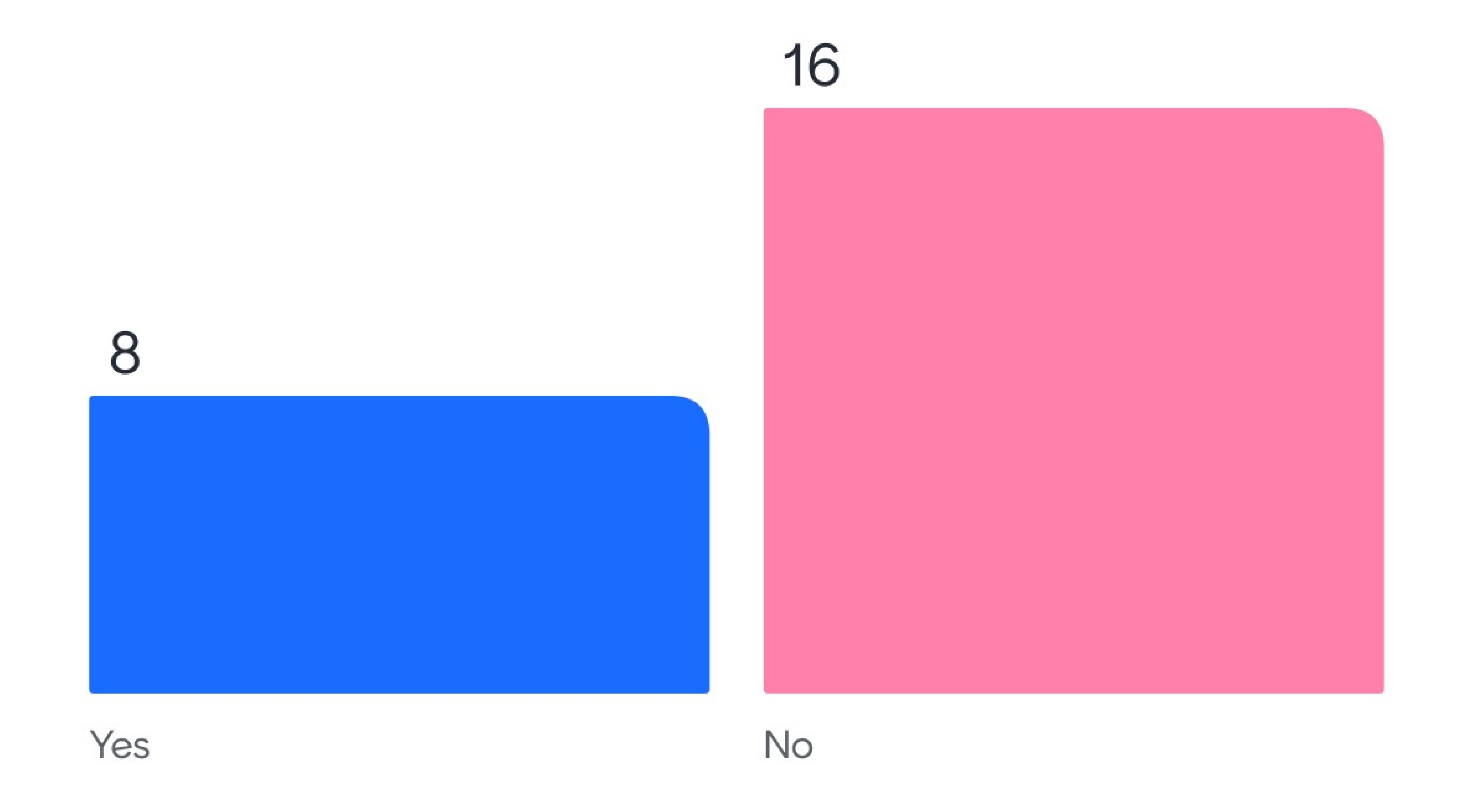
B. Software Licences

- 1. A software licence is a legal tool that allows people to use and redistribute software without infringing the rights of the copyright holder.
- 2. A software licence makes provisions such as acceptable use of the software and restrictions to it, exclusivity, conditions for sub-licensing, and liability.
- 3. Key licences for research software are the FLOSS (Free/Libre and Open Source Software) licences because software developed under open-source licences fits well into the vision and the goals of open science that the large majority of research institutions pursue.

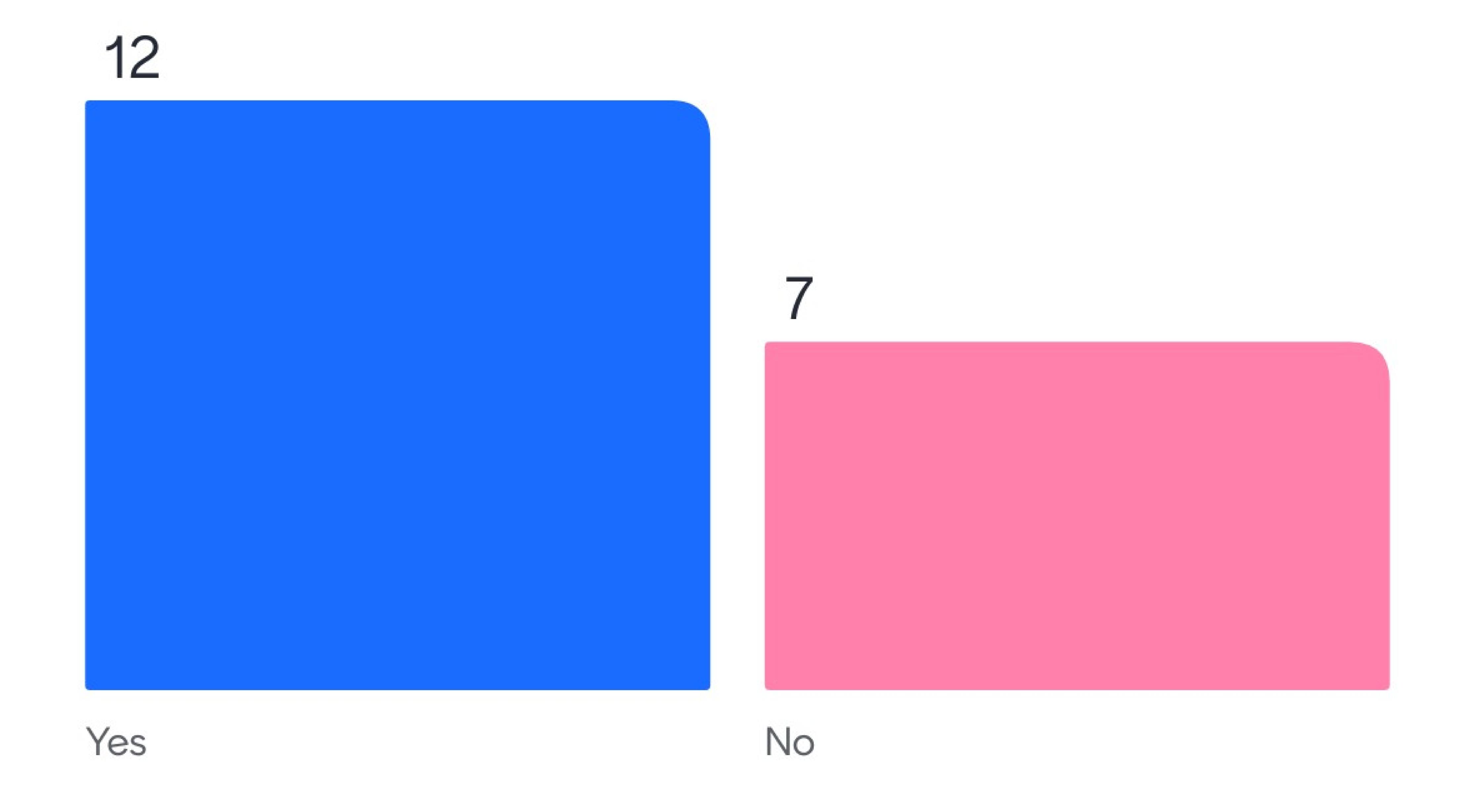
What is the software licence you use most often?



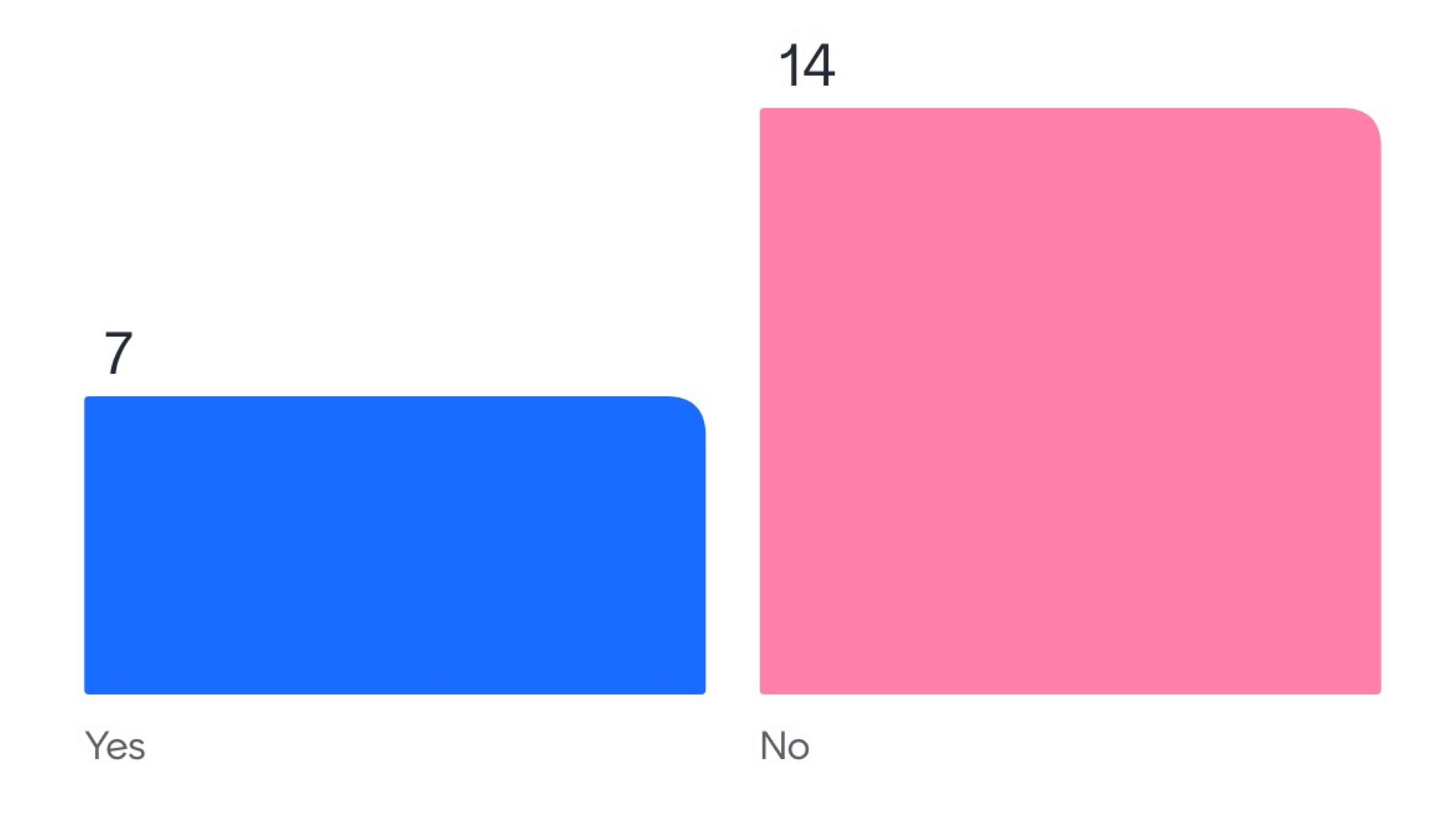
Does your research institution influence your choice of licence?



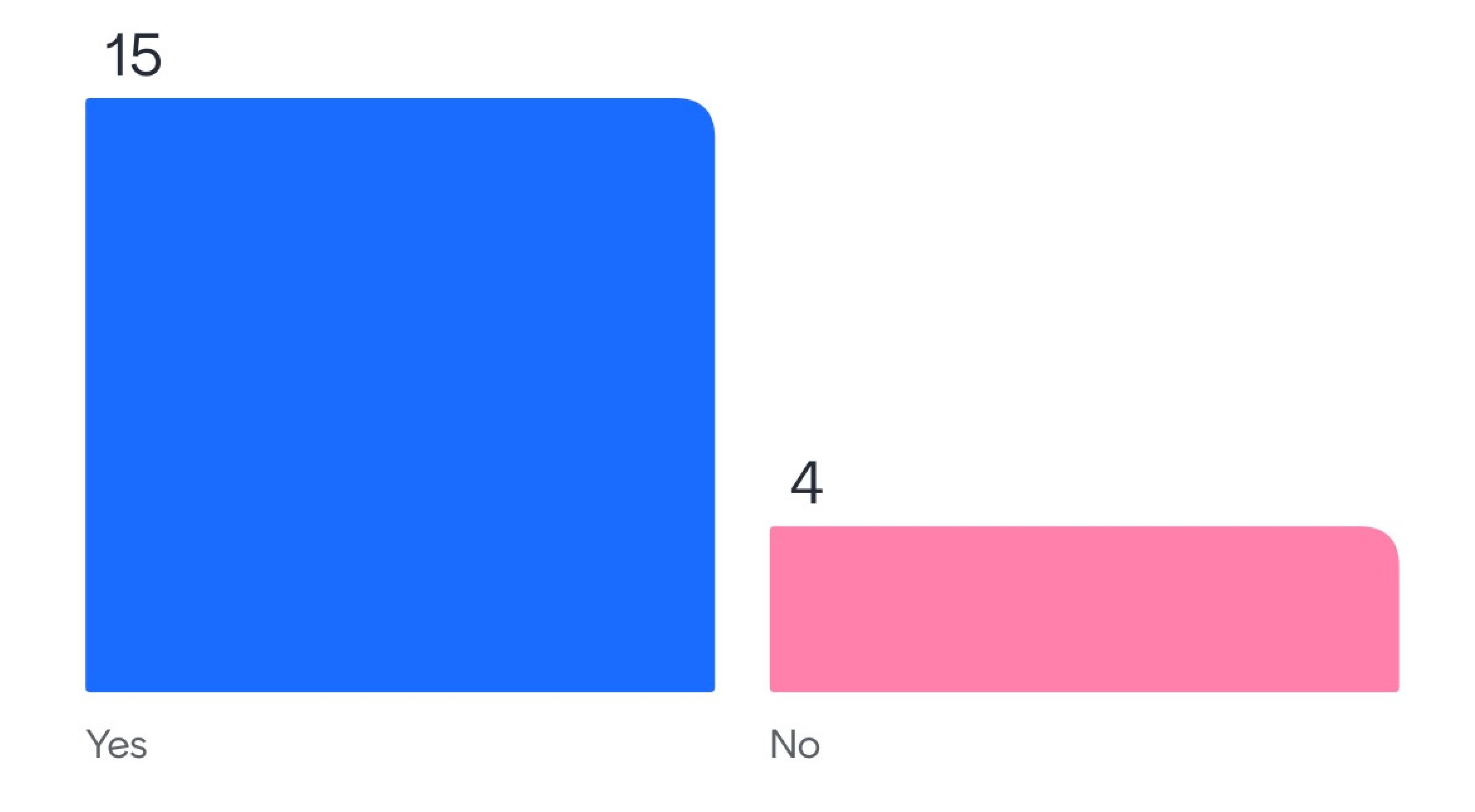
Do constraints posed by your funders influence your choice of licence?



Does your institution provide any training/advice about software licences?



Do you feel part of the FLOSS (Free/Libre and Open Source Software) community while developing research software?



Copyright <YEAR> <COPYRIGHT HOLDER>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Source: https://opensource.org/license/mit

The MIT Licence (OS)

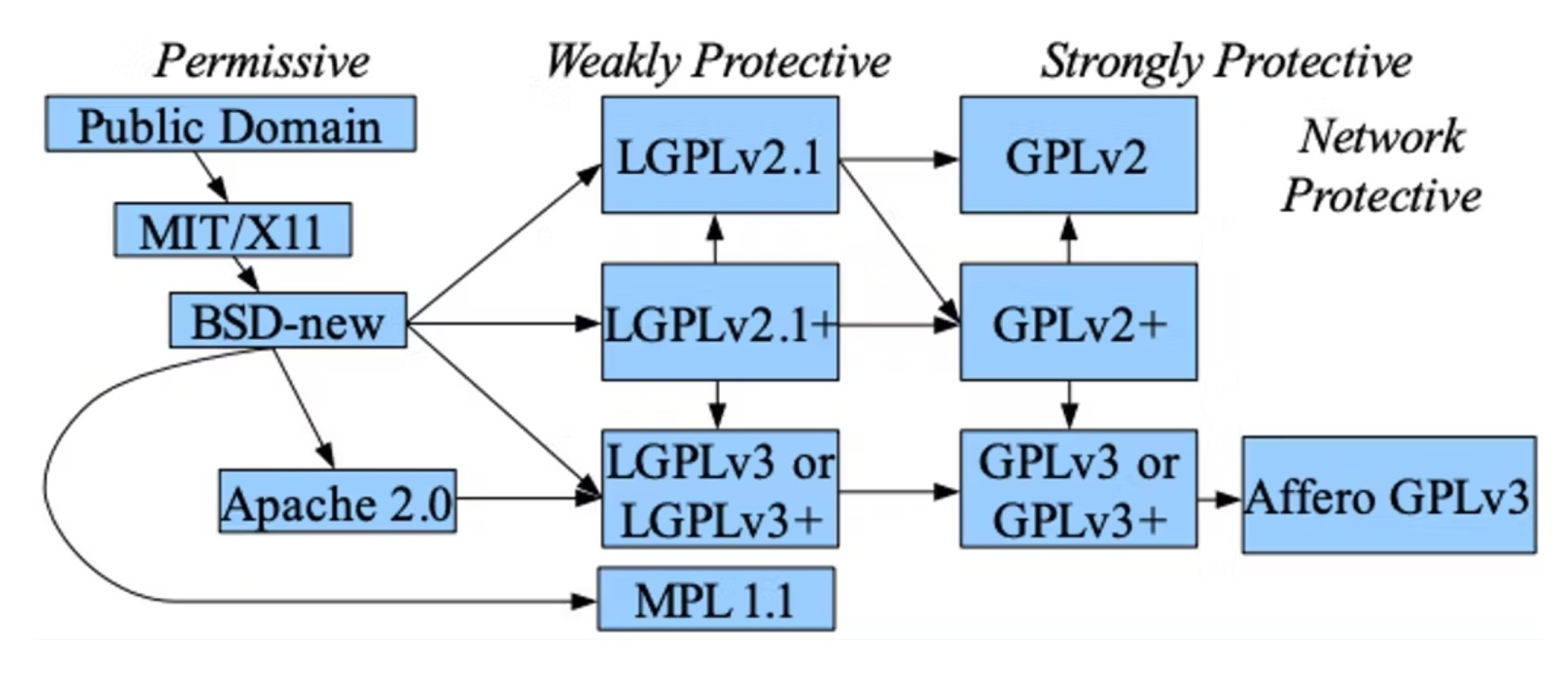
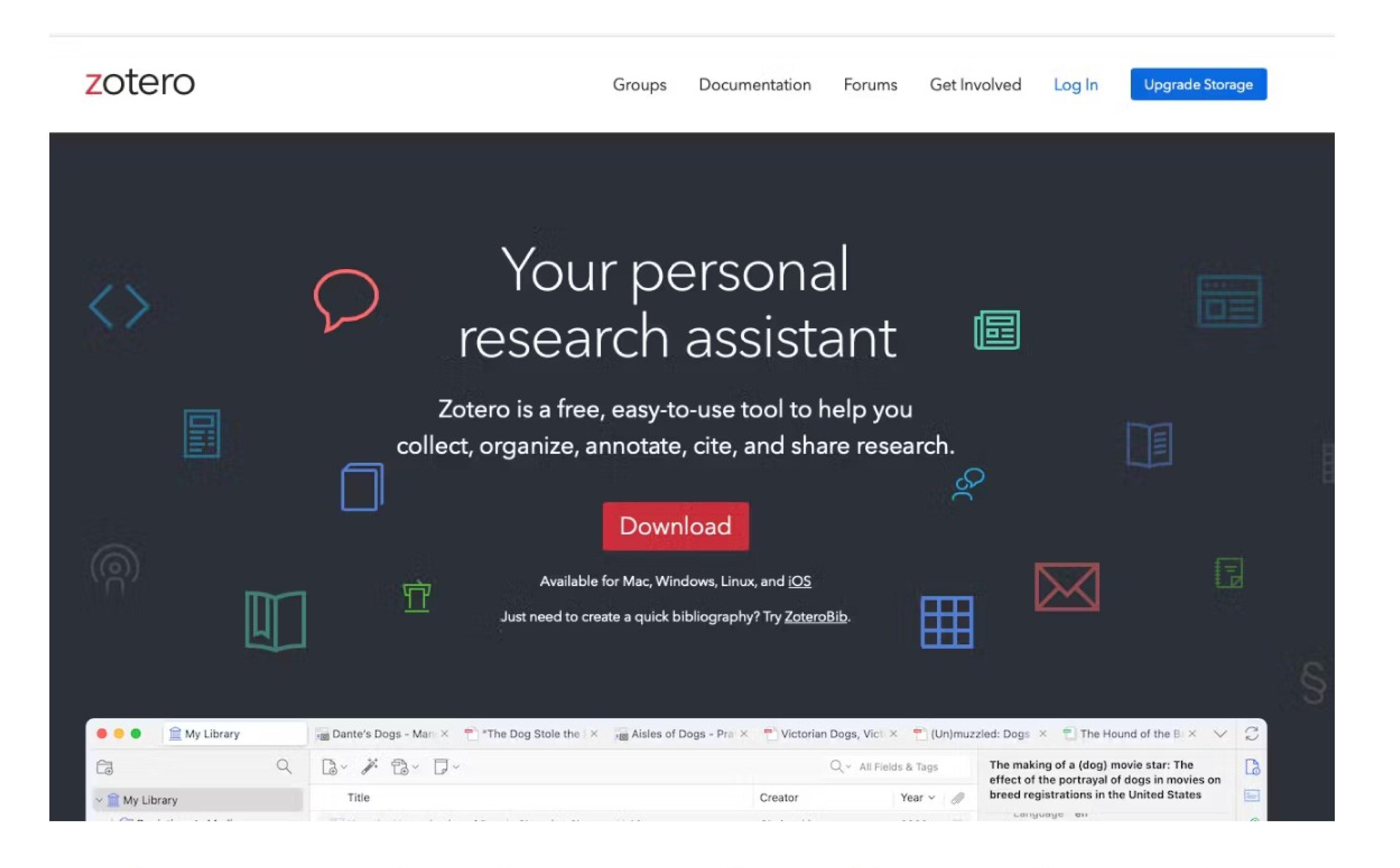


Image source: David A. Wheeler, 2007 See also: https://www.gnu.org/licenses/lice

Popular Open Source Software Licences



An example of research software licensing

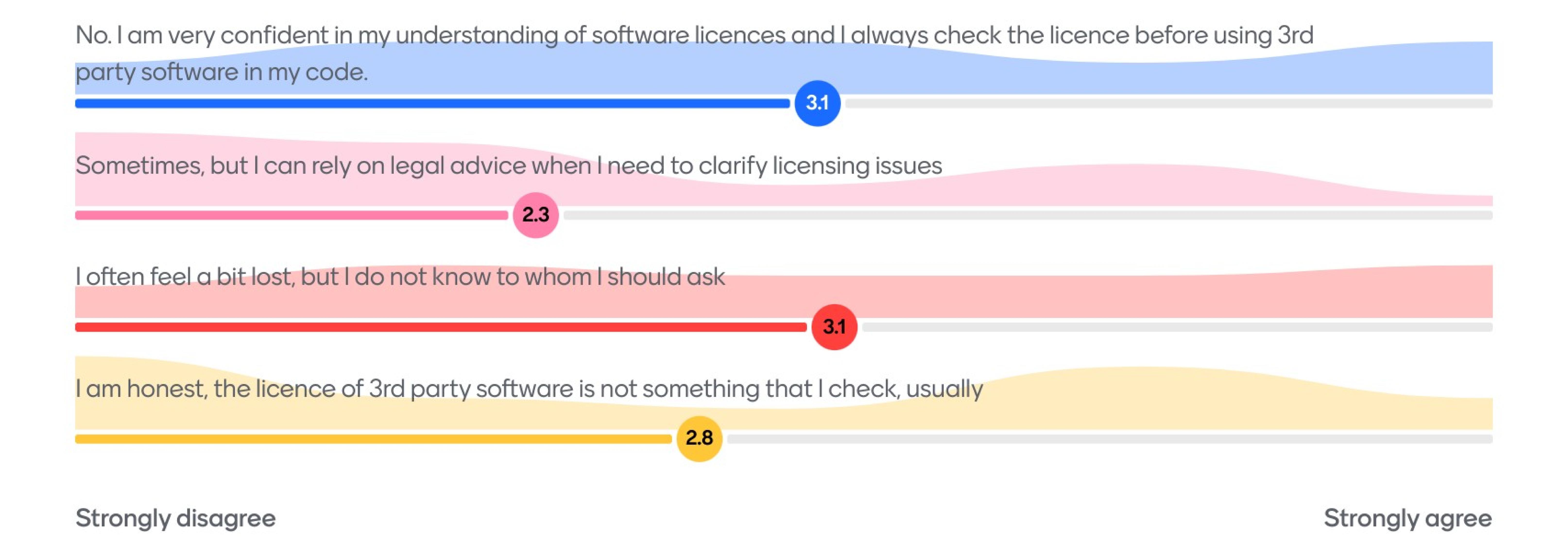
Licence and Terms of Service

Zotero Licence: "Unless otherwise indicated, the source code of the Zotero project is released under the <u>GNU Affero General Public License (version 3)</u>." CC-BY-SA 4.0 or CC-BY-NC-SA 3.0 apply to the Zotero documentation.

Zotero Terms of Service: They include a section on "Limitation of Liability", "Disclaimer of Warranties", "Copyright (as in provisions related to possible infringement of third-party intellectual property rights), legal jurisdiction, etc.

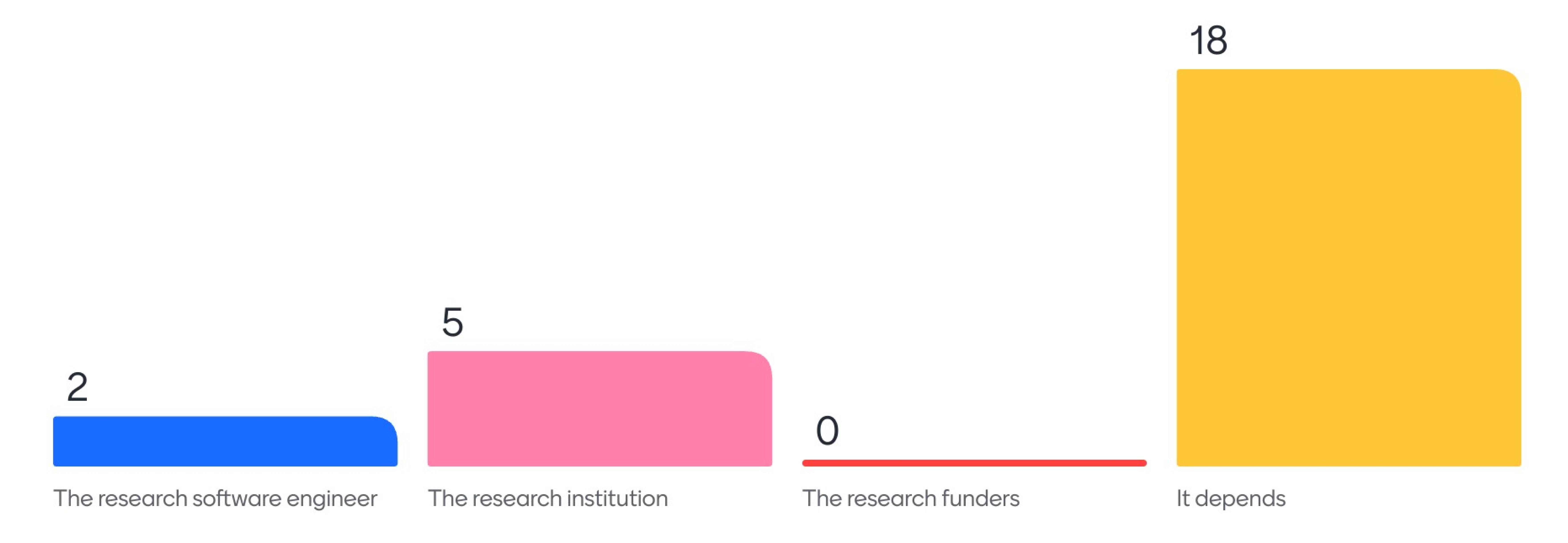
Zotero is a project of the Corporation for Digital Scholarship (nonprofit organisation).

Are you worried about infringing third-party copyright when you develop research software?





In case of third-party copyright infringement, who is liable?



Where can you find help?

- → Licence Selectors (e.g., GitHub CHOOSEALICENSE or for OSS)
- → Recommendations/Toolkits for License Management (e.g. REUSE SOFTWARE, FOSSOLOGY)

Questions? Comments?

13 questions 17 upvotes



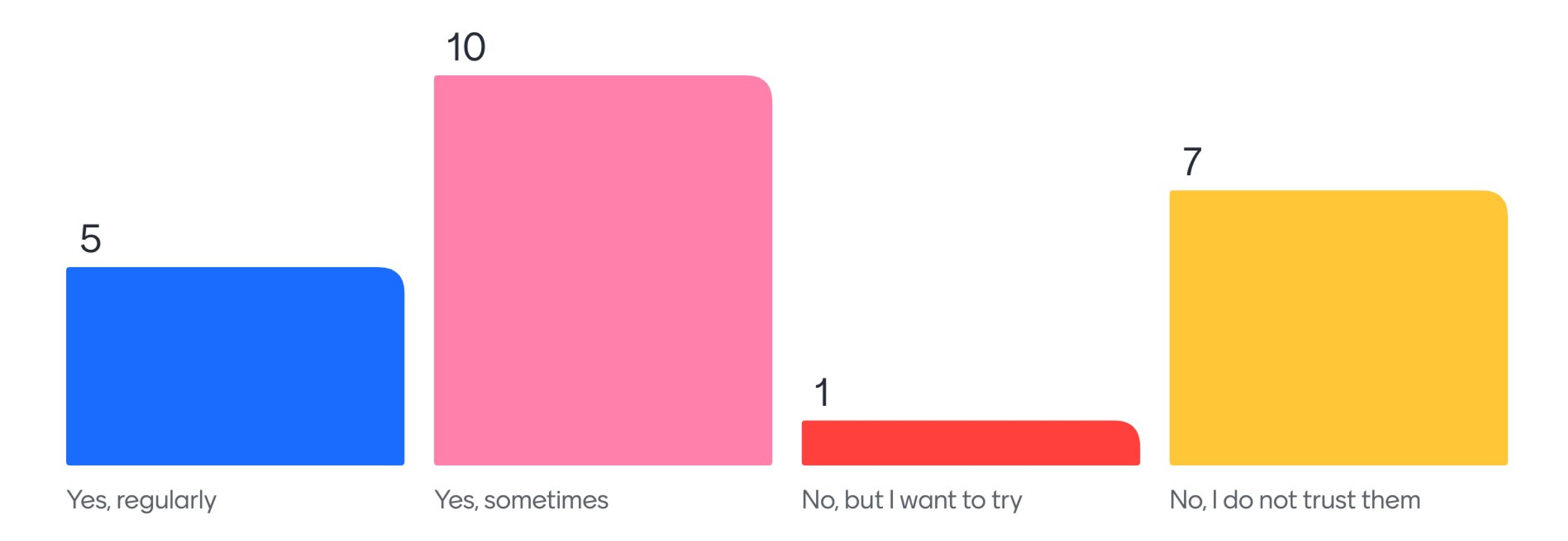
10 Minutes Break

C. Al, Software, Legal Issues

- 1. Al Coding Assistants
- 2. Al Products and Services

C1. Al Coding Assistants

Do you use Al coding assistants?





If you use Al coding assistants, which one(s) do you use?

GitHib Copilot Github copiot, chatapt claude.ai ChatGPT GitHub Copilot copilot copilot

If you use AI coding assistants, which one(s) do you use?

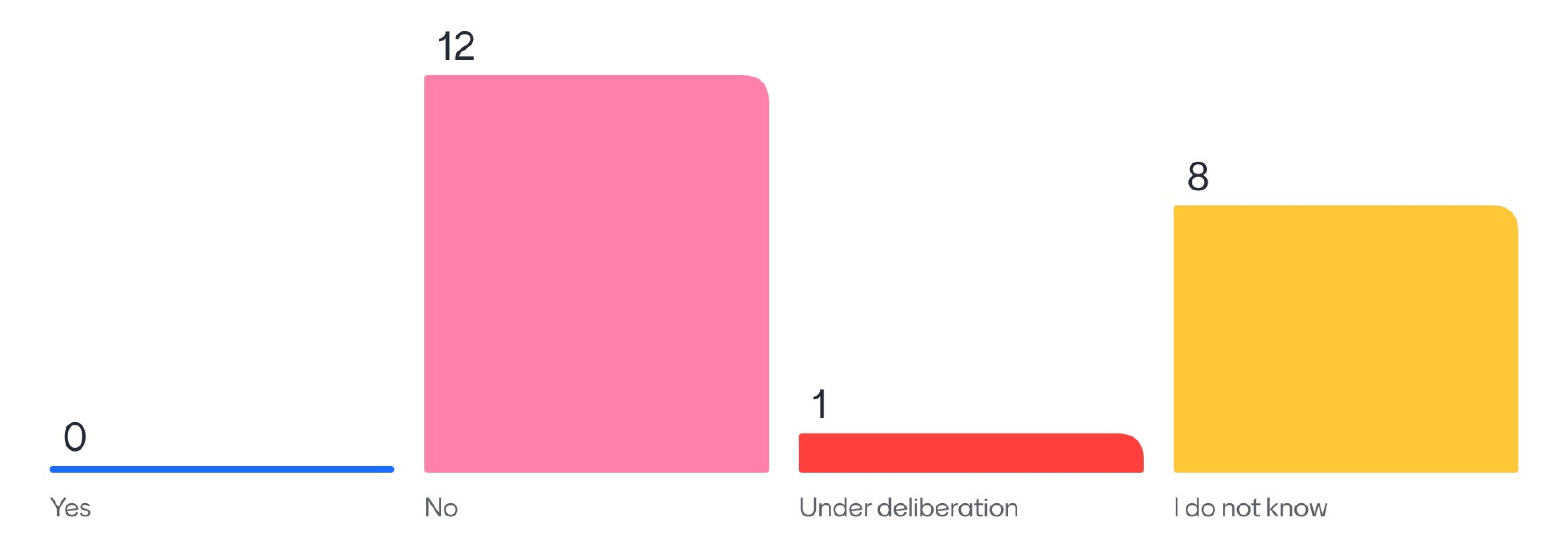
Github copilot Aistudio.google.com Chatapt blablador Chatgpt chatgpt Deepseek assistants and colleagues resort to ChatGPT sometimes

If you use Al coding assistants, which one(s) do you use?

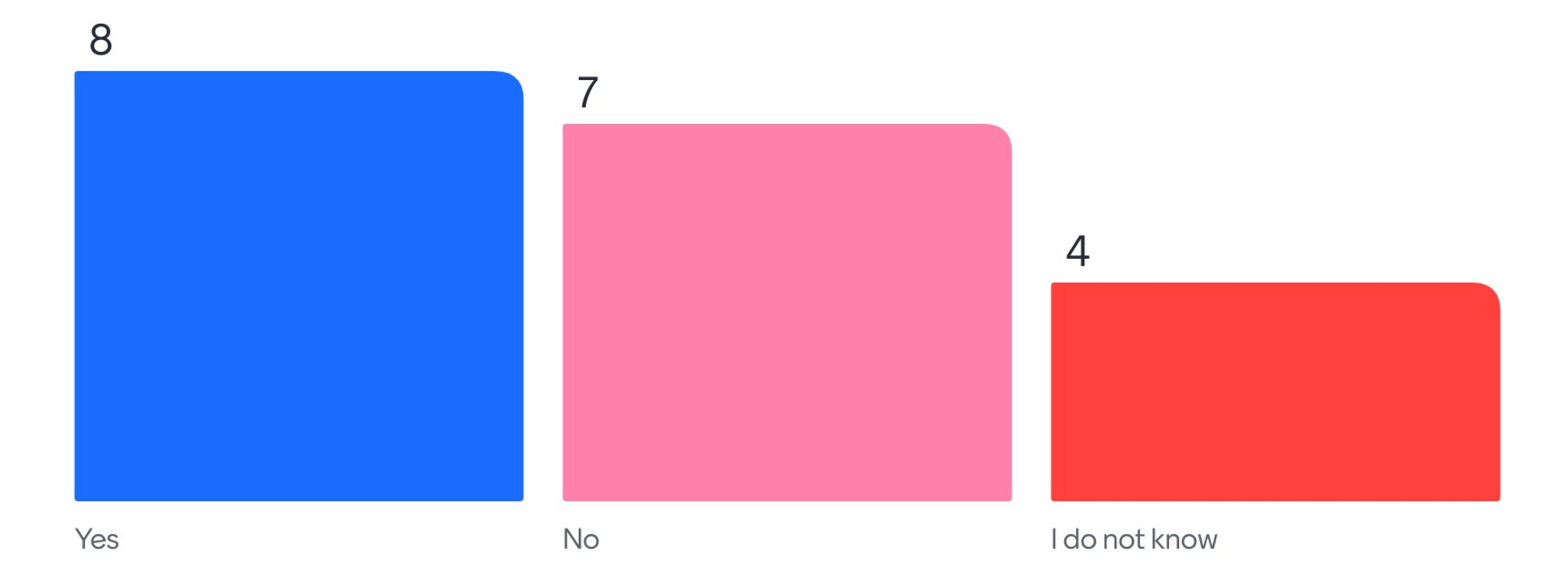
ChatGPT

Several assistants provided by GWDG.

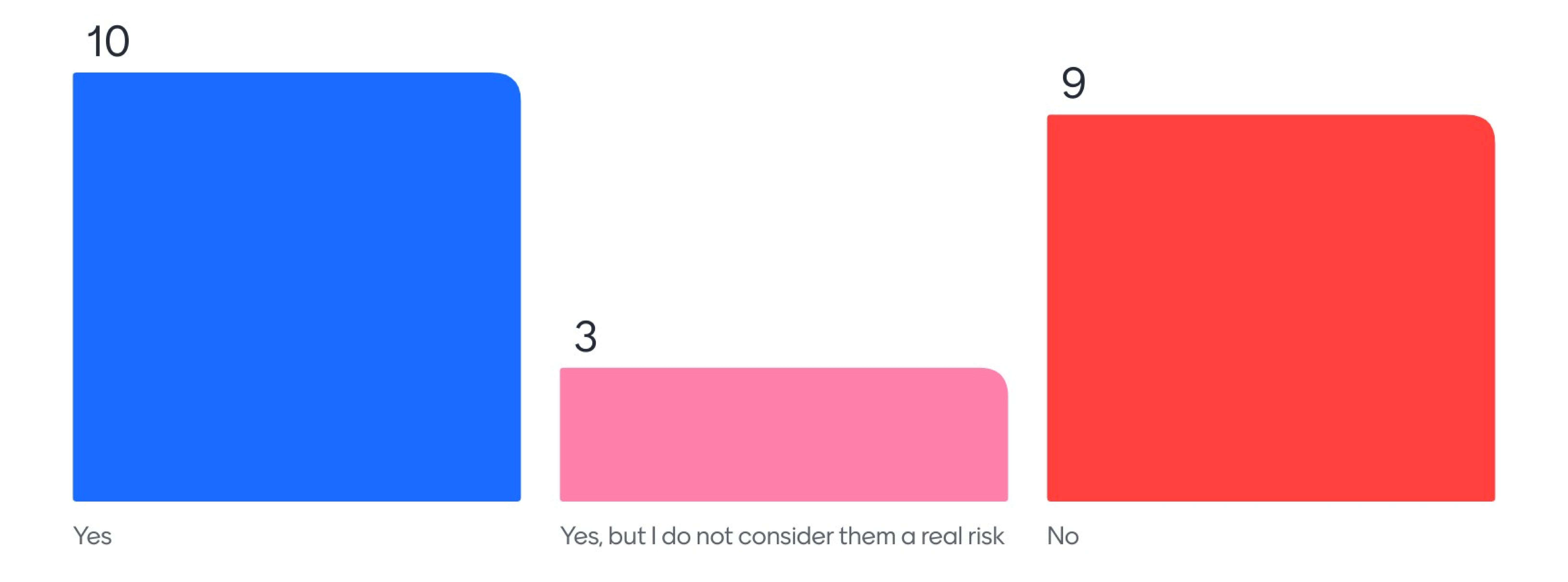
Does your research institution has a policy for Al coding assistants?



Does your research institution pay a licence for using Al coding assistants?



Are you aware of the legal issues associated with the use of Al coding assistants?





Problems With Al Coding Assistants

- 1. Questionable copyright status of Al-generated code
- 2. Infringement of third-party intellectual property rights and consequent lawsuits

Copyright status of Al-generated code

- Human authorship is typically required for achieving copyright legal protection.
- Unless a court of law decides differently (or there are changes in copyright law), it is to be expected that Al-generated code is "Public Domain" (therefore, you cannot apply a disclaimer of liability).
- Public domain software is not a novelty (e.g., <u>SQLite</u> is Public Domain software), but it does not really fit in the FLOSS licensing scheme. Public domain code can be included in software with a FLOSS licence, but not the other way around.

Infringement of third-party IPR and consequent lawsuits

- Al coding assistants are trained on open-source repositories. These open-source repositories have both permissive (e.g., MIT) and restrictive (e.g., GPL) licences. It is up to developers to check that the Al-generated code does not infringe third-party IPR.
- Since 2022, a complaint has been filed against GitHub Copilot, Microsoft, and OpenAI, in California, on behalf of open-source programmers. The lawsuit alleges violations of open-source licences by Copilot. The lawsuit is in progress. More information here: https://githubcopilotlitigation.com/case-updates.html

C2. Al Products and Services

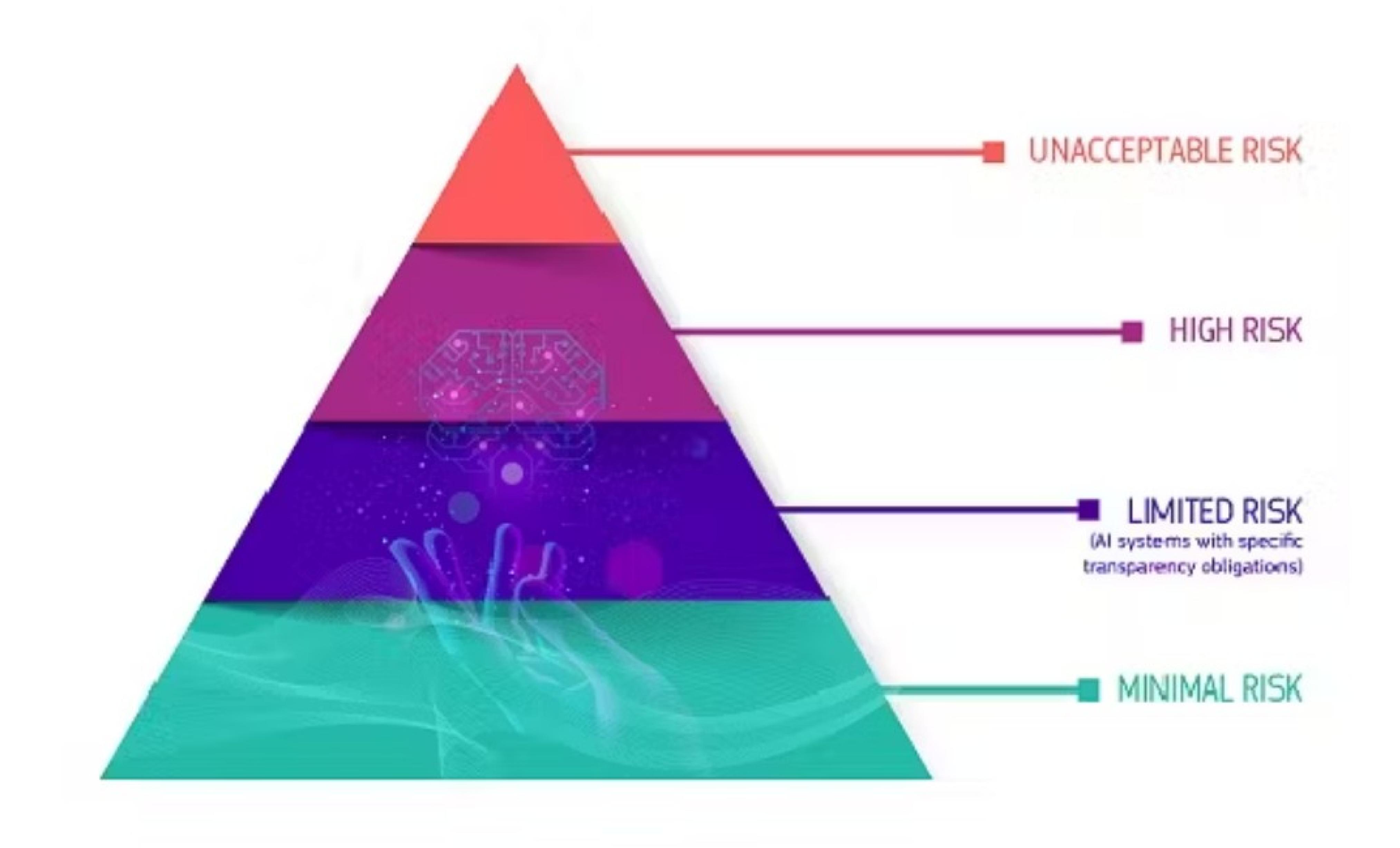
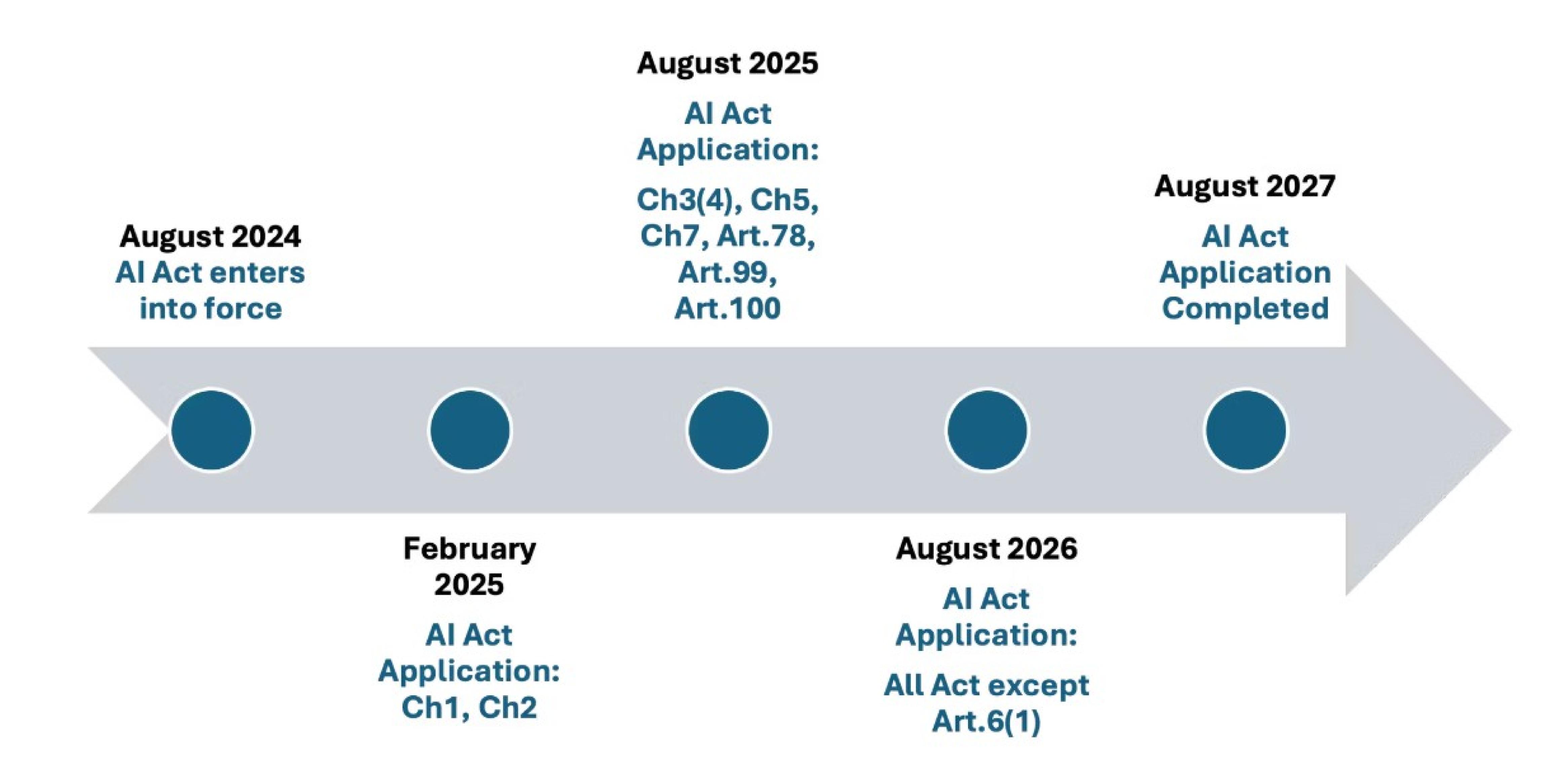


Image source: https://digital-strategy.ec.europa.eu/en/policies/regulatory-frame

EU Al Act (Regulation 2024/1689)



Source: https://artificialintelligenceact.eu/implementation-timeline/

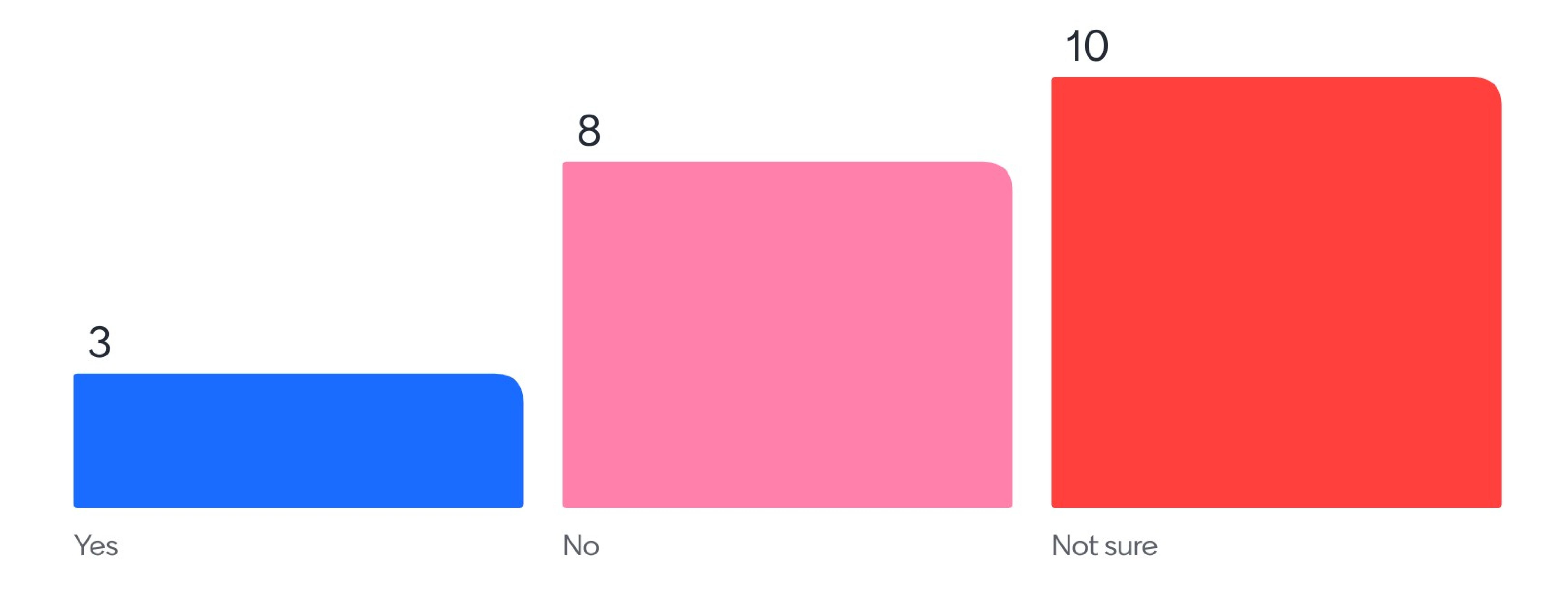
Al ACT Application Timeline

What does this mean for research?

- "This Regulation does not apply to AI systems or AI models, including their output, specifically developed and put into service for the sole purpose of scientific research and development". (AI Act Art. 2.6)

"This Regulation does not apply to any research, testing or development activity regarding Al systems or Al models prior to their being placed on the market or put into service. Such activities shall be conducted in accordance with applicable Union law. Testing in real world conditions shall not be covered by that exclusion". (Al Act Art. 2.8)

Do you expect repercussions in your work due to the EU AI Act?



If yes, what kind?

takes time to read, understand, interpret, comply

These are not Lawyer's Problems. These are RSE Problems.



What other legal topics related to research software interest you?

13 questions 17 upvotes



Thank you for taking part in the workshop

I kindly acknowledge the support of the German Research Foundation (DFG Grant No. 528674292)