

CERN OSPO, 2024 and 2025

Axel Naumann for the CERN OSPO



Your OSPO

- Official body at CERN to support open-source hardware + software
 - Mandate approved May 2023
- Inter-departmental, cross-organization body: rare yet good uptake
 - Twelve official representatives (10..20% FTE each), almost all parts of CERN represented: experienced practitioners
- Substantial offer by CERN, for CERN staff and users
- Open-source seen as a relevant topic, lots of enthusiasm!



Motivation: Tradition

24th February, 1978

Mr. R. Brun (DD Division) informed me that, following contacts with Mr. L. Kaminsky and others at Serpukhov, the CERN H-BOOK program had been adapted to run on the ICL computer of IHEP.

In view of the above, I would like to draw your attention to the mutual benefit we would derive from a Serpukhov H-BOOK version compatible with the CERN one, widely used also outside CERN, in the

The H-BOOK program used at other computers is regularly updated by CERN with the collaboration of the local programmers and experts, and the same assistance could also be given to IHEP.



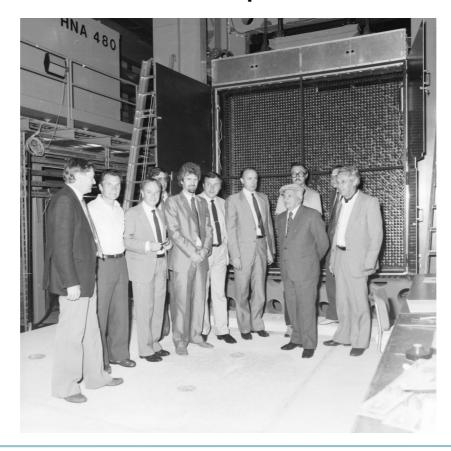
Departmental Representatives

- Matthias Bonora (TE)
- Hamza Boukabache (HSE)
- Andriy Boychenko (HSE)
- Han Dols (KT)
- Philip Elson (BE)
- Alexander Yohei Huss (TH)
- Micha Moskovic (RCS-SIS)

- Axel Naumann (EP) 2024 Chair
- Joao Pequenao (IR)
- Javier Serrano (BE)
- Giacomo Tenaglia (IT) incoming 2025 Chair
- Vasilis Vlachoudis (SY)



Departmental Representatives







The Real OSPO Team

- Matthias Bonora (TE)
- Hamza Boukabache (HSE)
- Andriy Boychenko (HSE)
- Gianluca De Bonis (IT)
- Han Dols (KT)
- Sünje Dallmeier-Thiessen (SIS)
- Philip Elson (BE)
- Victoria S. Huisman Sigcha (IT)
- Alexander Yohei Huss (TH)

- Iris Kyranou (RCS-SIS)
- Micha Moskovic (RCS-SIS)
- Axel Naumann (EP)
- Joao Pequenao (IR)
- Javier Serrano (BE)
- Dane Tacchini (KT)
- Giacomo Tenaglia (IT)
- Vasilis Vlachoudis (SY)
- Antonia Winkler (RCS-SIS)



Our first year!

- 41 email conversations, 25 forum topics
 - 9 requests for open-sourcing
 - 7 instances of help with licensing
 - 13 external contacts
- Conferences: CHEP (<u>OSPO</u>, <u>catalogues</u>), <u>FPGA Dev Forum</u>, <u>FOSS Backstage</u>
- 4 presentations outside CERN





Example: UN + CERN OSPO = a Love Affaire!

- Invited as external advisor to UN open-source retreat
- ice;
- Input on rationale for open source; policies-in-practice;
 on-premises gitlab; license vs int'l org; etc
- Invited to <u>UN's OSPOs for Good</u> event, showcasing CERN's potential in open source
- Presented open source motivation and recommendations to UN Secretariat



Achievements:

Technical Work



Technical Website

- https://ospo.docs.cern.ch
- Official open source procedures and best practices
- Guidance: run open-source projects, hardware-specific aspects
- Public website: significant interest from outside CERN!
- Evolving and growing, but critical mass exists

⚠ This website is work in progress. Send your feedback on the OSPO forum 🔘 🖸

□ CERN OSPO Technical Documentation

Recommendations for copyright and licence notices

If you are open-sourcing software or gateware, we recommend that you generally follow the REUSE guidelines for affixing copyright and licensing notices to your work.

A copyright notice is a brief statement that allows to assert the ownership of a work, and the time of its creation. It should indicate the copyright holder i.e. CERN, and the year of creation of the element of your work that holds this copyright statement, such as a source file or drawing. The indication of the initial year of creation is sufficient, and there is no need to indicate a time frame or a successive number of years.

The licence notice provides an indication of the licence under which the



OSPO at Work



Policies: Changing the "How"

- "How to open source at CERN"
 - Different procedure for software and hardware
 - By default, software is open source at CERN!
- Building on top of <u>past</u> <u>policies</u>
- Processes based on trust rather than approval processes
 - Simpler, reality checked, and pragmatic
- Avoiding the policy weight: recommendations!



Technical Recommendations: Highlights

- Introduction to (c), license, due diligence, hardware, gateware
- Put (c) year when file is created, don't update / add
- Keep original licenses, don't add "CERN is an international organization with special rights and immunities"
- Adapt <u>REUSE</u> (SPDX) for license and (c) declarations
 - Will be recommending <u>new version</u> human and tool readable REUSE.toml!



Contributor License Agreements

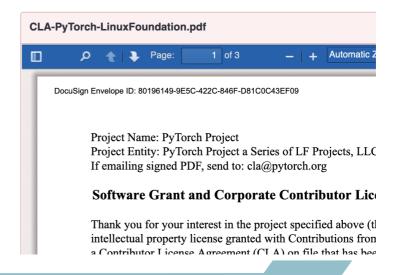
Centrally handle CLAs for CERN

PyTorch CLA (LinuxFoundation)

CERN OSPO

Organizational Contributor License Agreement for CERN personnel wishing

Files





"Achievements?!"

- CERN is *diverse*: analysis software 🔂 lifesaving software
 - Extreme differences in requirements and expectations
 - Varying relevance of open source
- OSPO ≠ open-source evangelists
 - Impact through small, pragmatic steps
- OSPO approval process took two years: big achievement!
- Agreeing across all of CERN: big achievement!





Plans

- Fill gaps in recommendations: license chooser! Apache 2 vs GPL!
- Project with Software Heritage: measure CERN's open-source impact in SH's database of The World's Open Source
- Scout for partnerships to maximize impact of CERN's open source
- Engage with EC / European OSPOs
- Initiate CERN sponsoring non-CERN open source we rely on?
- Help with CERN's participation at open-source conferences?



2025 and you!

- What issues do open-source projects face at CERN?
- What do you want us to work on, where can we help?
- How can we increase your impact, beyond high energy physics?

Should we change community interaction?

Role of the <u>forum</u>?

Is the OSPO visible enough?



Conclusion



OSPO Since September 2023

- Extremely productive first year
- Carried by incredible enthusiasm within CERN, from the outside and also within the OSPO!
- We have many plans for 2025
 - Example: project with Software Heritage
 - But I'm curious to hear what *you* think we should be doing!



Links + Contact

https://opensource.cern

Public-facing website

https://ospo.docs.cern.ch

Technical documentation

https://ospo.web.cern.ch

Discussion forum (CERN account required)

Open.Source@cern.ch

CERN OSPO



