Standards vs Source: The semantic overload behind a conflict

Simon Phipps Open Source Initiative September2023



Software Is Still Eating The World

- Hardware standards are increasingly dominated by software standards
- Interoperable software is best developed collaboratively with shared reference core code open source
- So standards increasingly need open source counterparts
- Open source software also leverages standards well

Open Source ≠ Open Standards

- "Open" is one of the most overloaded terms in our field
- Open Source and Open Standards do **not** have related methods or objectives
- They are at best orthogonal domains
- At worst they are incompatible

Where's the common ground?

Open source and open standards are obviously different, but the objectives of these communities are the same: interoperability, innovation and choice. The main difference is how they accomplish those goads, and by that I'm referring primarily to culture and pace.

From

https://techcrunch.com/2021/06/09/a-revival-at-the-intersection-of-open-source-and-open-standards/

Open Source

- Software **anyone can enjoy in any way without negotiating with its creators** because it is **licensed so that each user is self-sovereign**.
 - https://the.webm.ink/defining-open-source
- Many consequences of the freedoms available, but open source is primarily about developer/user freedom and self-sovereignty
- Achieved by licensing by rights holders so anyone can Use, Improve, Share & Monetise without further negotiation
- Made scalable by an open community license review process and approved license list that reduces the need to study license terms
- "Open" is about the **work product**, not the process

Open Standards

- Standards are intended as patterns aimed at ensuring independently manufactured or implemented products remain interoperable and safe
- "Open" because they are developed using an inclusive processes
- Intended to control vendor monopolies transmitted through corporate dominance of specifications
- Work product may be paywalled, may be patent encumbered
- "Open" is about the **process**, not the work product

"Open" in Open Standards

Definition intended to avoid anti-trust action

- Anti-trust: use of dominance in a market to secure dominance in unrelated markets
- Among others, a significant mechanism for anti-trust is cartels
- SDOs all have rigorous rules to prevent the SDO becoming a cartel
- A cartel is "a group of independent market participants who collude with each other in order to improve their profits and dominate the market."
- Main avoidance mechanism is "open to all under the same terms" same fees, same IP terms, same participation rules
- Hence "open" here means "the process is available to all equally"

Open Standards Funding Models

- Requirements-led
 - Industry agrees requirements, companies contribute IP, winner embeds SEPs
 - Monetised after standardisation through <u>royalty-due</u> patents (SEPs)
- Implementation-led
 - Industry harmonises implementations, mostly on a <u>royalty-waived</u> basis
 - Monetised through products in the market and by adjacent business
- Both leverage patents, just differently
 - *neither* involve abandoning IP
- Only one of these is compatible with open source...

Software Freedom & Negotiation

- OSI-approved licenses grant all rights necessary to enjoy the software **without negotiation** with the rights holders
 - Compliance ≠ Negotiation
- So standards in the requirements-led model, with royalty-due patents that must be negotiated, are not implementable by true open source communities
 - Some counter-examples appear to exist, but they turn out to have additional agreements to handle the patents
 - Recent research confirms patent licenses are not practically available to open source projects

Policy Issues

- Current policy favours royalty-due approaches for industrial innovation
- Current policy also promotes open source
- This discontinuity must be resolved for industrial leverage of open source

OSR - Open Standards Requirement for Software

- OSR addressed the difference in 2006 <u>https://opensource.org/osr</u>
- Explains the minimum requirement for a standard to be implementable as open source
 - "An "open standard" must not prohibit conforming implementations in open source software."
- Widely referenced globally
- Settled the debate for most people for a decade
 - OASIS, for example, cites and adheres to OSR

Recommendations

- 1. Discussion of "standards" must identify if the anticipated model is requirements-led or implementation-led.
- 2. Clearly scope adoption expectations before setting IPR terms
- 3. Recognise that leveraging IPR can involve market growth and adjacent model enablement as well as royalty collection
- 4. If scope includes open source implementation, terms must be on a **royalty-waived** basis
- 5. If scope must include both requirements-led and implementation-led elements, **partition** them with their own IP regimes
- 6. Public policy must expressly accommodate **both** approaches

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