# How to facilitate Open Source software licensing and get it right?

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Open Source Automation Development Lab (OSADL) eG





#### Agenda

- What is OSADL and why was it founded?
- What are the two most frequent questions we have answered over the past 10 years of helping companies license open source software?
  - 1. Users asked: What precisely do we have to do to fulfill the obligations of particular Open Source licenses?
  - 2. Companies asked: Which tasks must be assigned to which employees to achieve company-wide copyright license compliance?





#### 15 years ago at a purchase department ...

Project lead: "We need to get someone to develop a Linux driver for our new machine controller. Here's a purchase order for the work."

Purchase department: "Okay. Let me check the purchase order to make sure it follows our standard procedure: NDA to be executed, source going into company's safe ... "

Project lead: "Nope, we're going with Open Source - source gets published to the Internet."

Purchase department: "What? We're paying for the development but the source code goes out to the Internet? If everybody can use the source code, why are we the only ones paying for this? No way this can fly!"







#### ... but then came OSADL

OSADL initially was a purchase community of "Open Source" Software.

OSADL promotes and coordinates the development of Open Source software for the automation industry – and also for all others who use Open Source software in products.

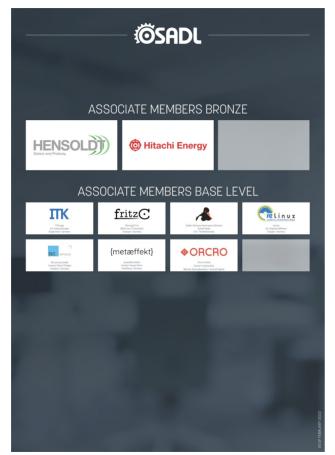
Over time, OSADL has applied the community approach to a whole range of other services:

- Legal support, legal assessment, best practices, audits
- Quality assessment and assurance of Open Source software, technical support
- Safety certification
- Networking, training courses, seminars
- Marketing





#### **Associate and academic OSADL members**









#### Most frequently asked question #1

Users asked:

What precisely do we have to do to fulfill the obligations of particular Open Source licenses?





#### Most frequently asked question #1

Users asked:

What precisely do we have to do to fulfill the obligations of particular Open Source licenses?

OSADL's answer:

Use our Open Source License Obligations Checklists





#### **Problems with Open Source licenses**

- Open Source licenses grant a number of common rights for Open Source software, but the obligations of different licenses may vary greatly.
- License texts are written by **different** people with **different** expectations, educations and writing skills.
- All license obligations of **all** licenses contained in a project have to be fulfilled.
- A common understanding of license obligations is required.





#### Open Source License Obligations Checklists

```
■USE CASE Source code delivery
      YOU MUST Provide Copyright notice
                                                Interpretation A All or some
                                          Ref.
           ATTRIBUTE Highlighted
           ATTRIBUTE Appropriately
      YOU MUST Provide Warranty disclaimer (Warranty disclaimer ⇔)
           ATTRIBUTE Highlighted
           ATTRIBUTE Appropriately
      YOU MUST NOT Modify License notices
      YOU MUST NOT Modify Warranty disclaimer (Warranty disclaimer 

)
      YOU MUST Provide License text
    YOU MUST Grant License
                ATTRIBUTE Original license
           YOU MUST Provide Modification notice
           YOU MUST Provide Modification date

✓ IF Interactive AND Display License announcement

                YOU MUST Display License announcement
                YOU MUST Display Copyright notice
                                                          Interpretation A All or some
                YOU MUST Display Warranty disclaimer
                                                        Ref.
                YOU MUST Reference License text
                                                   Interpretation \( \Delta \) Legal and/or other means
      YOU MUST NOT Restrict Granted rights
```

https://www.osadl.org/OSLOC

#### **Checklist elements**

- "Language" elements, e.g.
  - YOU MUST (to encode a license obligation)
  - YOU MUST NOT (to encode a license prohibition)
- Actions to encode what MUST and what MUST NOT be done, e.g.
  - YOU MUST Provide
  - YOU MUST NOT Restrict
- Objects to the actions, e.g.
  - YOU MUST Provide Copyright notice
  - YOU MUST NOT Restrict Granted rights





#### **Checklist elements**

- \*Language "Language" ele The You MUST NOT language construct specifies an individual license prohibition, i.e. what not to do, probably among other things, to become license compliant. It may optionally be followed by indented language constructs such as ATTRIBUTE that further describe the license prohibition.
  - YOU MUST (to bridge constructs such as ATTRIBUTE that
  - YOU MUST NOT (to encode a license prohibition)
- Actions to encode what M

The action to **Restrict** means to partly or completely withdraw formerly granted permissions or supplied access conditions.

e.g.

- YOU MUST **Provide**
- YOU MUST NOT Restrict
- Objects to the actions, e.g.

The term **Granted rights** describes contractual permissions of use or access that otherwise would not exist.

- YOU MUST Provide Copyright notice
- YOU MUST NOT Restrict Granted rights





#### **Example: BSD-2-Clause**

```
    ✓USE CASE Source code delivery
        YOU MUST Forward Copyright notices
        YOU MUST Forward License text
        Ref.
        YOU MUST Forward Warranty disclaimer
        Ref.
        YOU MUST Forward Warranty disclaimer
        Ref.
        YOU MUST Provide Copyright notices In Documentation OR Distribution material
        YOU MUST Provide License text In Documentation OR Distribution material
        Ref.
        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
        Ref.
        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
        Ref.
        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
        Ref.
        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
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        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
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        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
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        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material
        Ref.
        YOU MUST Provide Warranty disclaimer In Documentation OR Distribution Material
        Ref.
        YOU MUST Provide Warranty Disclaimer In Documentation OR Distribution Material
        YOU MUST Provide Warranty Disclaimer In Documentation OR Distribution Material
        Ref.
        YOU MUST Provide Warranty Disclaimer Material
        YO
```

#### **Example: BSD-2-Clause with selection**

USE CASE Source code delivery Ref.

✓USE CASE Binary delivery Ref.

YOU MUST Provide Copyright notices In Documentation OR Distribution material Ref.

YOU MUST Provide License text In Documentation OR Distribution material Ref.

YOU MUST Provide Warranty disclaimer In Documentation OR Distribution material Ref.

#### Example: BSD-2-Clause, printed checklist

USE CASE Binary delivery

- ☐ YOU MUST *Provide* Copyright notices In Documentation OR Distribution material
- ☐ YOU MUST *Provide* License text In Documentation OR Distribution material
- ☐ YOU MUST *Provide* Warranty disclaimer In Documentation OR Distribution material

#### Example: BSD-2-Clause, at QA department

#### USE CASE Binary delivery

- YOU MUST *Provide* Copyright notices In Documentation OR Distribution material
- YOU MUST *Provide* License text In Documentation OR Distribution material
- YOU MUST *Provide* Warranty disclaimer In Documentation OR Distribution material

### **Example: GPL-2.0-only (excerpt)**

USE CASE Source code delivery

Ref.

USE CASE Binary delivery

Ref.

### **Example: GPL-2.0-only (excerpt)**

```
USE CASE Source code delivery Ref.

USE CASE Binary delivery Ref.

EITHER Ref.

YOU MUST Provide Source code Ref.

OR

YOU MUST Provide Written offer (Written offer ⇔) Ref.
```

#### **Example: GPL-2.0-only (excerpt)**

```
USE CASE Source code delivery
                                  Ref.
VUSE CASE Binary delivery
     EITHER
                Ref.
            YOU MUST Provide Source code
                                            Ref.
     OR
            YOU MUST Provide Written offer (Written offer ⇔)
                                                            Ref.
                  ATTRIBUTE Duration 3 years
                                               Ref.
                  ATTRIBUTE To Any third party
                                                Ref.
                  ATTRIBUTE No profit
                  ATTRIBUTE Delayed source code delivery
                                                           Ref.
                       ATTRIBUTE Machine-readable
                                                     Ref.
                       ATTRIBUTE Customary medium
                       ATTRIBUTE Including Tool chain information
                                                                   Ref.
                       ATTRIBUTE Including Installation scripts
                                                               Ref.
```

#### **Example: GPL-2.0-only with reference**



YOU MUST *Provide* Written offer (Written offer ⇔) Ref.

ATTRIBUTE Duration 3 years Hide ref.

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

ATTRIBUTE To Any third party Ref.

ATTRIBUTE No profit Ref.

ATTRIBUTE Delayed source code delivery Ref.

ATTRIBUTE Machine-readable Ref.

ATTRIBUTE Customary medium Ref.

ATTRIBUTE Including Tool chain information Ref.

ATTRIBUTE Including Installation scripts Ref.

#### Approval and feedback

#### Request for approval of checklists project participants

Please assist us to validate the above text. When clicking on the below button, you confirm that you approve the text in its current version taking into account the disclaimer below the text.

Approved

#### Request for feedback from checklists project participants

Please assist us to improve the above text taking into account the disclaimer below the text. Your feedback will be integrated into the text as soon as possible, and you will be notified. We gratefully acknowledge any comments, amendments and additions.

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You may type or paste your text here.											

Submit

#### Additional information – Interpretation

• Where a license is unclear, a possible interpretation is given.

YOU MUST NOT Restrict Granted rights



Interpretation \( \Delta \) Legal and/or other means

#### Additional information – Interpretation

• Where a license is unclear, a possible interpretation is given.

#### YOU MUST NOT Restrict Granted rights

Ref.

Hide interpretation

Legal and/or other means: The named 'further restrictions' may relate to the restrictions of this license and, thus, prohibit further restricting legal clauses; however, it also is conceivable that any other means such as technical hindrance methods are included in the meaning of 'further restrictions'.

#### Additional information – Copyleft clause

Obligations for derivative works: Is there a copyleft clause?
 (e.g. MPL-2.0: Yes)

#### Copyleft clause

• Yes Hide ref.

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

#### Additional information – Copyleft clause

Obligations for derivative works: Is there a copyleft clause?
 (e.g. OpenSSL: Questionable)

#### Copyleft clause

• Questionable Hide ref.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Hide interpretation

Questionable copyleft: The final statement of the appended SSLeay License "The licence and distribution terms for any publically available version or derivative of this code cannot be changed" normally must be interpreted as a copyleft clause, but there is no general consensus on this interpretation. Therefore, a recommendation on the compatibility of the OpenSSL license cannot be given.

#### Additional information – Patent hints

Does the license contain patent hints? (e.a. EPL-2.0)

#### Patent hints

- Yes Hide ref.
  - b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in Source Code or other form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.
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If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

#### **Additional information – Templates**

- Text templates for various circumstances:
  - Acknowledgment
  - Written offer
  - Warranty disclaimer
  - Notices





#### Additional information – Templates

This product contains software components that are licensed by the holder of the rights

• e.g. GPL-2.0: Written offer

```
as free software, or Open Source software, under GNU General Public License, Version 2.
The source code for these software components can be obtained from us on a data carrier
(CD, DVD or USB stick) by submitting a request to our customer service department at
the following address within three years after delivery of the product by us:
[Company name]
[Contact]
[Address]
Please provide the following product information
「Namel
[Serial number]
[Date of delivery]
and transfer 5 euros to the account [account information] to cover the costs of
providing the data carrier and shipping it.
```

### License compatibility

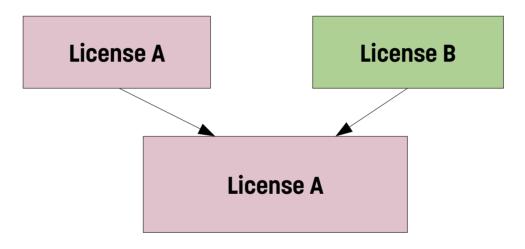
- Copyright allows to combine software components under different licenses.
- Copying and distributing such a combined (or derivative)
  work is only possible if the licenses are compatible.
- Compatibility is given when there are no conflicting license obligations or prohibitions.
- The compatibility of all licenses of the OSADL Open Source License Obligations Checklists has been evaluated.





#### Unilateral license compatibility

• If two licenses are **unilaterally** compatible, the combined work has to be licensed under one (leading) license.

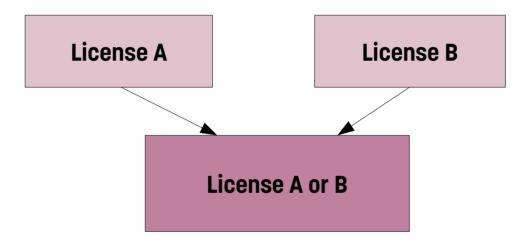






#### Bilateral license compatibility

• If two licenses are **bilaterally** compatible, the combined work may be licensed under either of the involved licenses.







### License compatibility

#### Guidelines:

- Copyleft licenses are not compatible with each other (exception by explicit declaration).
- Permissive licenses are bilaterally compatible.
- Permissive licenses are unilaterally compatible with copyleft licenses (exception if additional obligations).
- If a license is unclear or the copyleft is questionable, compatibility has to be decided on an individual basis.





### License compatibility

- Guidelines:
  - Copyleft licenses are not compatible with each other.
  - Permissive licenses are bilaterally compatible.
  - Permissive licenses are unilaterally compatible with copyleft licenses.
  - If a license is unclear or the copyleft is questionable, compatibility has to be decided on an individual basis.





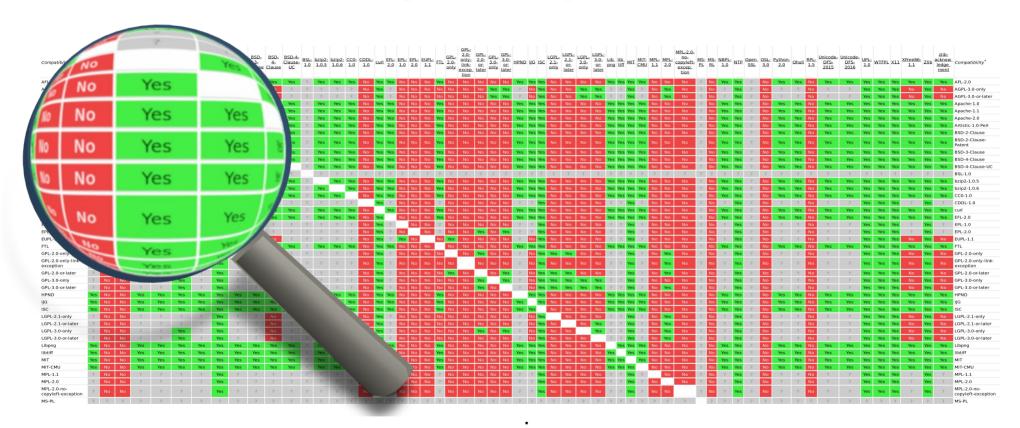
### **Compatibility matrix**







### **Compatibility matrix**







## Compatibility matrix GPL-2.0-only and BSD-2-Clause

Compatibility*	AFL- 2.0	AFL- 2.1	AGPL- 3.0- only	AGPL- 3.0- or- Iater	Apache- 1.0	Apache- 1.1	Apache- 2.0	Artistic- 1.0-Perl	/-	BSD-2- Clause- Patent	BSD- 3- Clause	BSD- 4- Clause	BSD-4- Clause- UC	BSL- 1.0	bzip2- 1.0.5
AFL-2.0		Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AFL-2.1	Yes		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
EUPL-1.1	?	?	No	No	No	No	?	?	Yes	Yes	Yes	No	No	?	Yes
FTL	Yes	Yes	No	No	Yes	Yes	Yes		-	S	Yes	Yes	Yes	?	Yes
GPL-2.0-only	?	?	No	No	No	No	?	`	Yes	S	Yes	No	No	?	Yes
GPL-2.0-only WITH Classpath- exception-2.0	?	?	No	No	No	No	?	· ·	Yes	Yes	Yes	No	No	?	Yes
GPL-2.0-or-later	?	?	No	No	No	No	?	?	Yes	Yes	Yes	No	No	?	Yes
GPL-3.0-only	?	?	Yes	No	No	No	Yes	?	Yes	Yes	Yes	No	No	?	Yes
GPL-3.0-or-later	?	?	No	Yes	No	No	Yes	?	Yes	Yes	Yes	No	No	?	Yes
HPND	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes



Leading license



#### Compatibility matrix BSD-2-Clause and GPL-2.0-only

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ompatibility <sup>*</sup>	AFL- 2.0	AFL- 2.1	AGPL- 3.0- only	AGPL- 3.0- or- later	Apache- 1.0	EPL- 2.0		FTL	GPL- 2.0- only	GPL-2.0- only WITH Classpath- exception- 2.0	GPL- 2.0- or- later	GPL- 3.0- only	G E
AFL-2.0		Yes	No	No	Yes	No	No	Yes	No	No	No	No	N
AFL-2.1	Yes		No	No	Yes	No	No	Yes	No	No	No	No	N
AGPL-3.0-only	?	?		No	No	No	No	No	No	No	No	Yes	Υe
AGPL-3.0-or-later	?	?	Yes		No	No	No	No	No	No	No	Yes	Ye
Apache-1.0	Yes	Yes	No	No		No	No	Yes	No	No	No	No	No
Apache-1.1	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No
Apache-2.0	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No
Artistic-1.0-Perl	Yes	Yes	No	No	Yes	No	No				No	No	No
BSD-2-Clause	Yes	Yes	No	No	Yes	No	No		Nc	)	No	No	No
BSD-2-Clause- Patent	Yes	Yes	No	No	Yes	No	Nc	100	110	140	No	No	Nc
BSD-3-Clause	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No
BSD-4-Clause	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No
BSD-4-Clause-UC	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No	No
BSL-1.0	?	?	No	No	?	No	No	?	No	No	No	No	No





### Compatibility matrix GPL-2.0-only and BSD-4-Clause

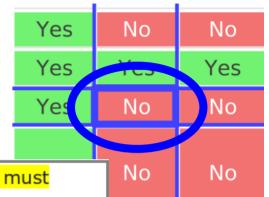
Compatibility*	AFL- 2.0	AFL- 2.1	AGPL- 3.0- only	AGPL- 3.0- or- later	Apache- 1.0	Apache- 1.1	Apache- 2.0	Artistic- 1.0-Perl	/_	BSD-2- Clause- Patent	BSD- 3- Clause	BSD- 4- Clause	BSD-4- Clause- UC	BSL- 1.0	bzip2- 1.0.5
AFL-2.0		Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
AFL-2.1	Yes		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes
EUPL-1.1	?	?	No	No	No	No	?	?	Yes	Yes	Yes	No	No	?	Yes
FTL	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes				?	Yes
GPL-2.0-only	?	?	No	No	No	No	?	?	Yes	Yes		No		?	Yes
GPL-2.0-only WITH Classpath- exception-2.0	?	?	No	No	No	No	?	?	Yes	Yes	Yes	No	No	?	Yes
GPL-2.0-or-later	?	?	No	No	No	No	?	?	Yes	Yes	Yes	No	No	?	Yes
GPL-3.0-only	?	?	Yes	No	No	No	Yes	?	Yes	Yes	Yes	No	No	?	Yes
GPL-3.0-or-later	?	?	No	Yes	No	No	Yes	?	Yes	Yes	Yes	No	No	?	Yes
HPND	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes



Leading license



### Compatibility matrix GPL-2.0-only and BSD-4-Clause



BSD-4clause 3. All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by the organization.

contradicts

#### GPL-2.0-only

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.





### Compatibility matrix Proprietary licenses

Typical proprietary license without any particularity	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	
Typical proprietary license and <u>restrict-ed</u> copyleft OSS is only linked	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	No	
Other particular proprietary license #1	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	
Other particular proprietary license #2	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	
Other particular proprietary license #3	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	
Compatibility*	<u>AFL-</u> 2.0	<u>AFL-</u> 2.1	AGPL- 3.0- only	AGPL- 3.0- or- later	Apache-	Apache- 1.1	Apache- 2.0	Artistic- 1.0-Perl	BSD- 2- Clause	BSD-2- Clause- Patent	BSD- 3- Clause	BSD- 4- Clause	BSD-4- Clause- UC		bzip2- 1.0.5	bzip2- 1.0.6		CDDL- 1.0	<u>CPL-</u> <u>1.0</u>	<u>curl</u>	<u>EFL-</u> 2.0	EPL- 1.0	EPL- 2.0	EUPL- 1.1	<u>FTL</u>	<u>GPL-</u> 2.0- only	Cl





#### Conclusion

- The freedom to choose the license terms under which conveying a copyright protected work is allowed has led to a large number of different licenses.
- The Open Source License Obligations Checklists project encodes the obligations of 70 licenses, as of today.
- In addition, the license compatibility is evaluated.





#### Access to the checklists

- For the time being, access to the checklists is granted to everybody on request; please write to *office@osadl.org* to obtain personal login data.
- Feedback on the quality and usability of the checklists is welcome.







# Are there any questions up to this point?





### Most frequently asked question #2

Companies asked:

Which tasks must be assigned to which employees to achieve company-wide copyright license compliance?





### Most frequently asked question #2

### Companies asked:

Which tasks must be assigned to which employees to achieve company-wide copyright license compliance?

OSADL's answer:

Implement a FOSS policy using our template form, the OSADL FOSS Policy Template





### The Basis for License Compliance

- A FOSS policy is needed ...
- ... to avoid copyright infringements,
- ... to create and maintain processes within a company,
- ... to establish understanding of concepts,
- ... to provide control over licensing of a company's IP,
- ... to meet **customer requirements**.





### **Open Source Policy Template**

- Different companies take different approaches to license compliance, a company's FOSS policy must reflect these.
- Creating a policy requires understanding and expertise.
- Using a policy requires it to be brief and specific.

→ The OSADL Open Source Policy Template is structured to take these requirements into account.





### Structure of the Open Source Policy Template

- Various chapters with template texts as basis for an individual policy
- Motivations and explanations for the creator of the company policy
- Options to choose from where there are alternative possibilities of interpreting or handling a situation
- text blocks to modify contracts and other documents
- Placeholders to be filled out individually
- → Annexes providing processes and forms for legal information
- Supplements providing technical, legal and practical background on copyright law and license compliance.





### Software flow in a company





### Software flow: Incoming software

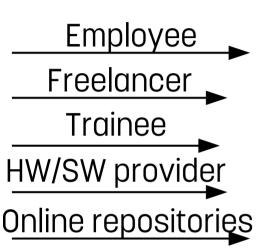


Human resources Purchase department





### Software flow: Own development



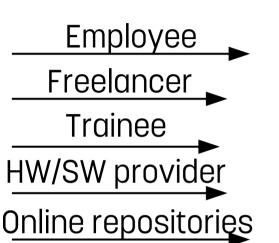
Development within the company

Human resources Purchase department Development department Project leads





### Software flow: Outgoing software



Human resources
Purchase department

Development within the company

Development department Project leads

Delivery

- Electronically
- Installed on HW
- On a medium
- Via Internet

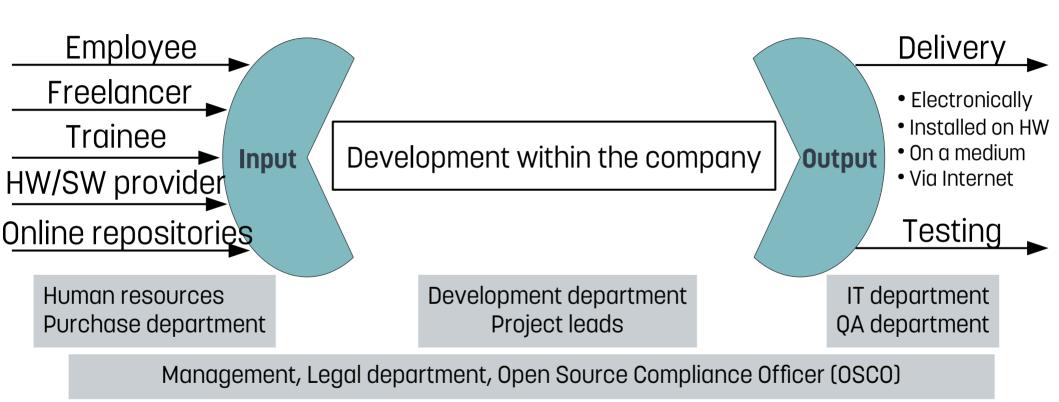
Testing

IT department QA department





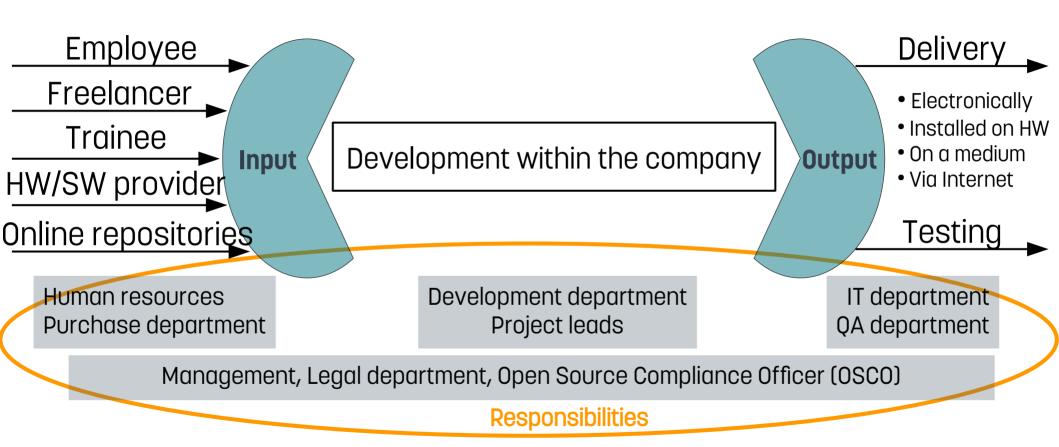
### Software flow: Input/output gateways







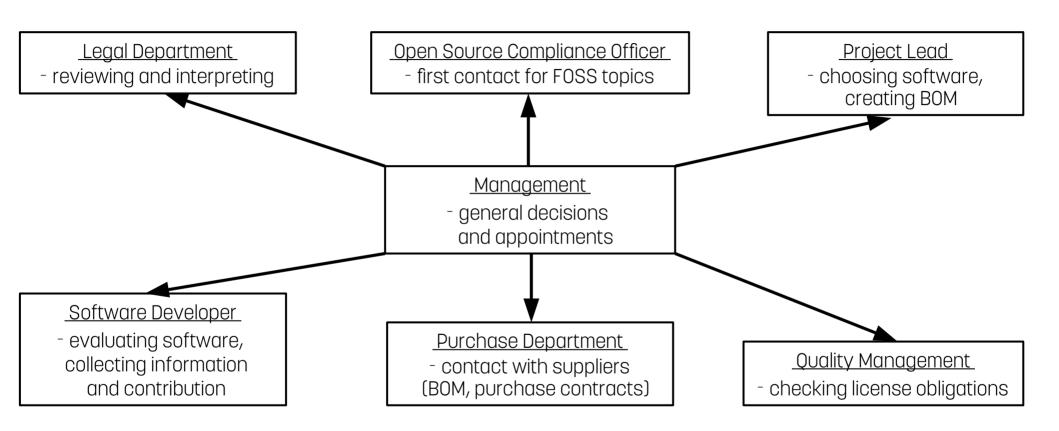
### Software flow: Responsibilities







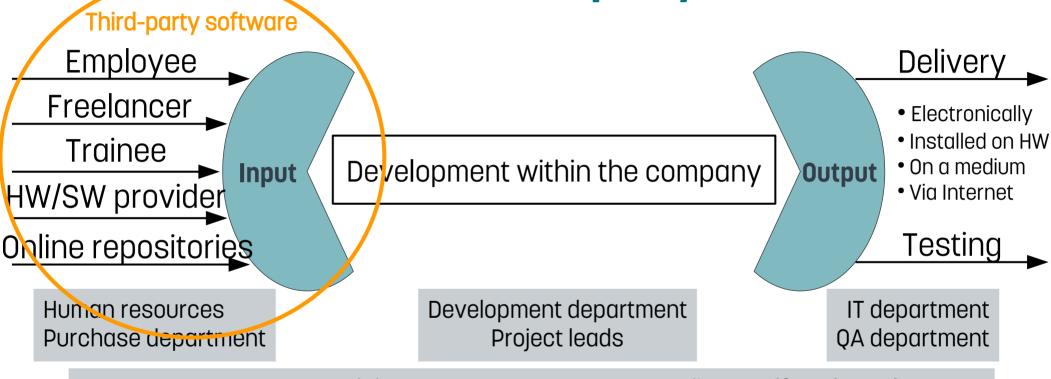
### Responsibilities







### Software flow: Third-party software



Management, Legal department, Open Source Compliance Officer (OSCO)





### Detection and analysis of third-party software

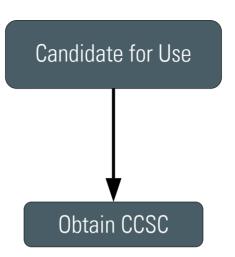
#### Goals

- Control over what external software is used
- Avoiding unlicensed software
- Basis for creating a BOM → Annex: Bill of Material

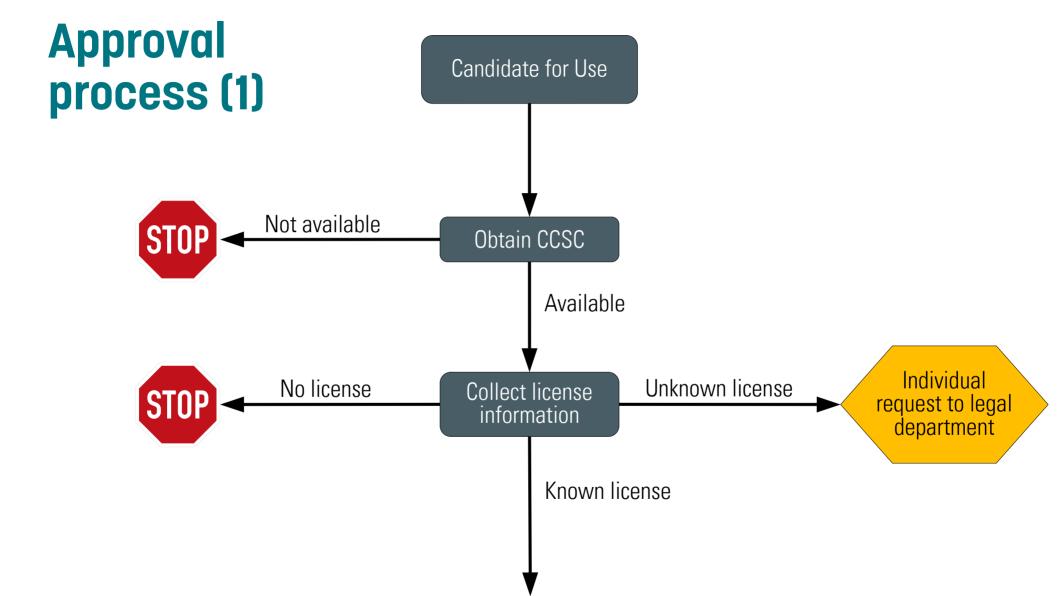




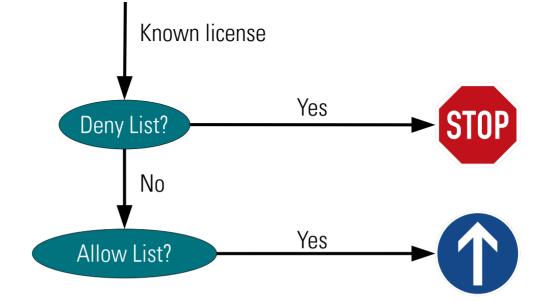
# Approval process (1)



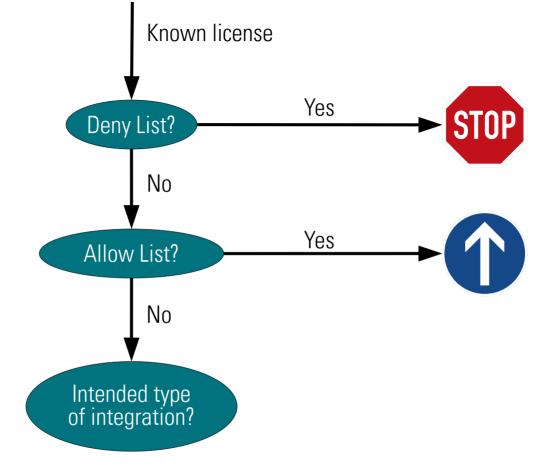
### Approval process (1) Candidate for Use Not available Obtain CCSC Available Collect license information



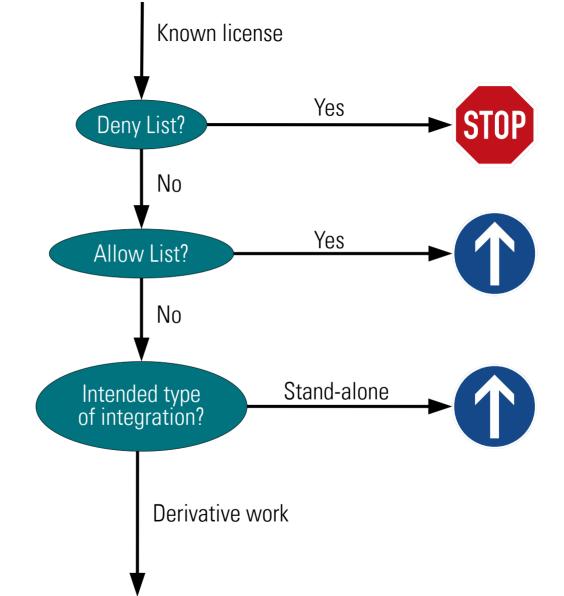
## Approval process (2)



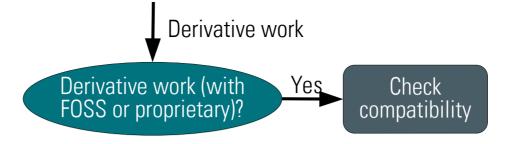
## Approval process (2)



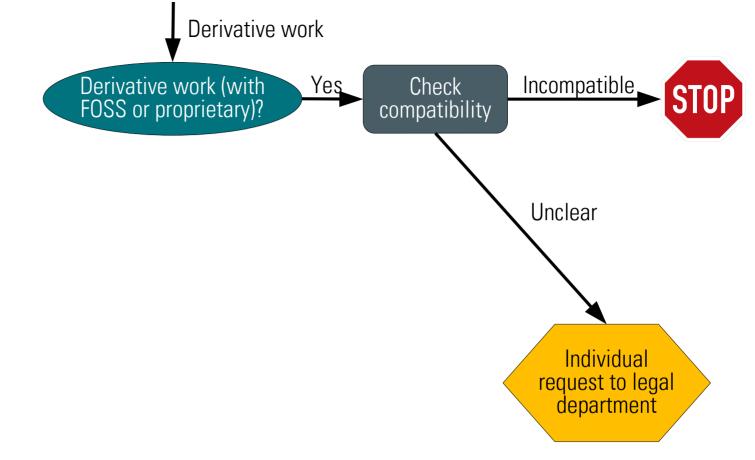
## Approval process (2)

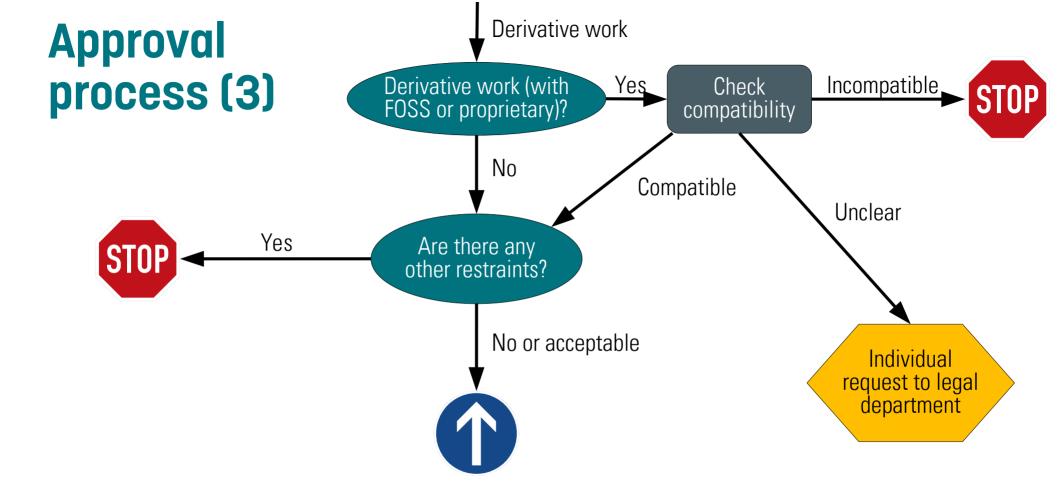


## Approval process (3)



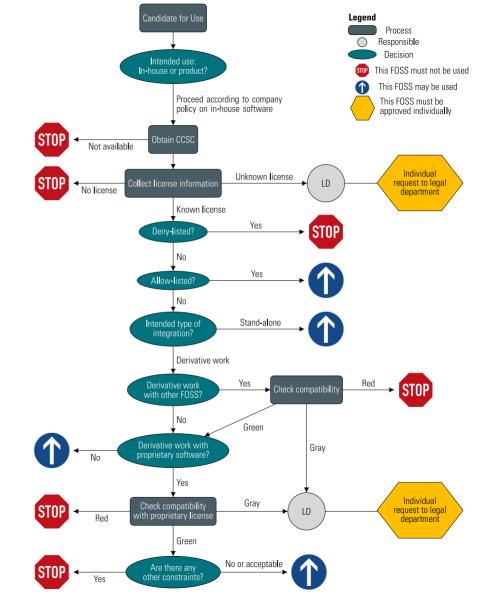
## Approval process (3)

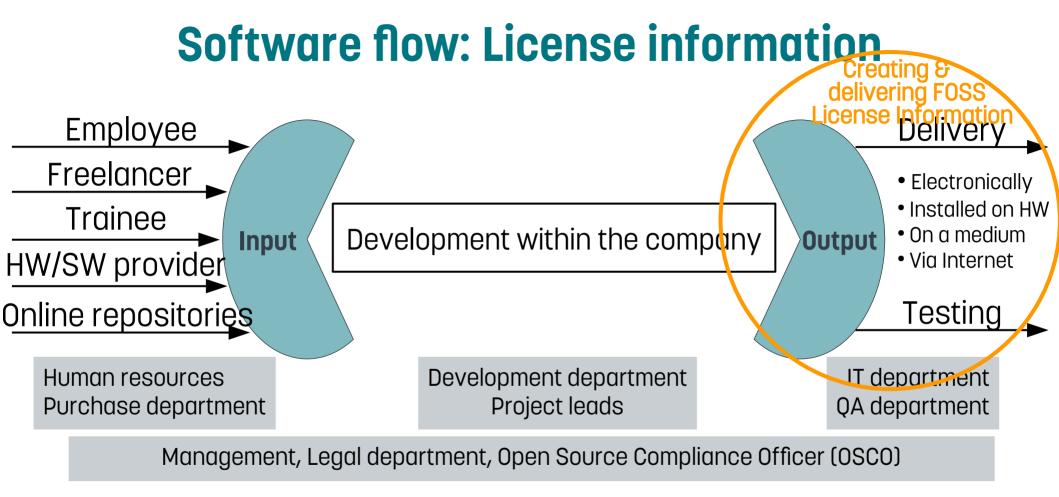




### Approval process (4)

Reduces individual requests, if a software component is legally suitable for use (distribution) in a product









### **FOSS License Information**

To fulfill FOSS license obligations, certain information, documentation and other material must be delivered together with the software:

- Information obligations: delivering license texts, copyright notices, modification notices, warranty disclaimers, acknowledgments, ...
- **Disclosure obligations:** delivering or offering the complete corresponding source code and build and installation instructions
- **Licensing obligations:** adapting company documents (*e.g.* EULA and Terms of Use), licensing own development correctly if a derivative work with software under a copyleft license is created





#### **FOSS License Information: Use cases**

Different use cases → different aspects to be considered:

- Unmodified or modified source code
- Unmodified or modified binaries
- Software as a Service (SaaS)
- Linux kernel in an embedded system
- Entire Linux distributions
- Updates

The **OSADL Open Source License Obligations Checklists** help to determine what is required (*www.osadl.org/OSLOC*).





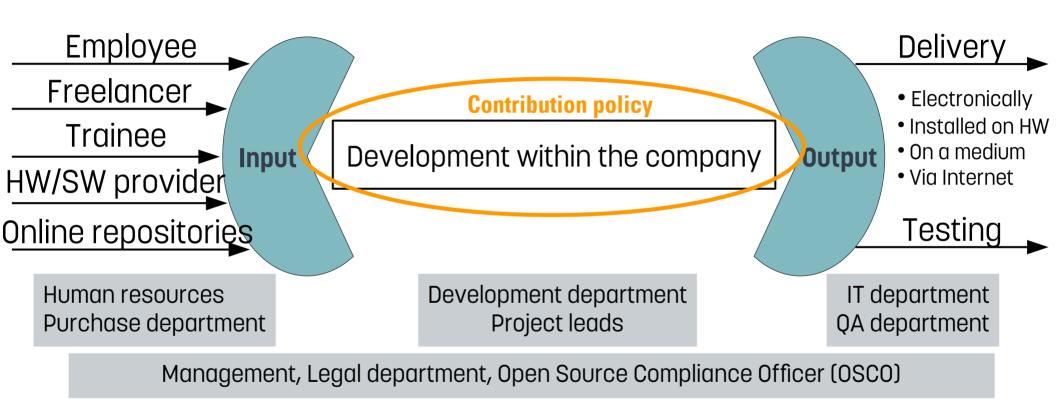
### **FOSS License Information: Delivery**

- Creating a **BOM** (Bill of Material) with all FOSS / Software components of a product and their licenses
- Quality management (before distribution starts):
  - For every FOSS component listed in the BOM the license information is checked for completeness according to the applicable checklist.
  - Correcting, if necessary
- Releasing the product for distribution together with FOSS license information





### Software flow: Contribution policy







### **Contribution to FOSS projects**

- § **69b UrhG** (German Copyright Act): The employer holds the exclusive rights of use of software that is created by employees in the course of their employment.
- Employees need a **permission**, to license software created in the course of their employment as FOSS.
- A FOSS policy should give guidelines to evaluate a possible contribution (approval of contributor, FOSS project and contribution)

→ Annex: Contribution permission





### **Additional topics**

- **Communication** of the FOSS Policy within the company and in employment contracts
- Selecting a suitable license for own FOSS projects
- Audits and certification (e.g. OpenChain, OSADL LCA)
- Patent considerations





### Supplements: Background information

- Comprehensive discussion and explanation of legal, technical and practical aspects.
- As separate documents
- Among others, on:
  - Derivative work and Copyleft
  - License compatibility
  - Software scanning
  - Rebuild and verification of the complete corresponding source code





#### II. Open Source Compliance Officer (OSCO)

The Open Source Compliance Officer (OSCO) represents the main contact person of our company in the context of using, copying and distributing FOSS of any kind. He or she coordinates all related activities and maintains a dedicated communication with representatives of the other roles listed below. The OSCO reports to the M and prepares decisions of the M with regard to the following issues:

- (Unclear) interpretation of FOSS licenses that could result in license violations are therefore relevant for the risk management of the company.
- Modification of this FOSS policy.

The assignment of the OSCO can be documented here or for example on a company's intranet or wiki pages. This decision might depend on how often the assignment changes.

Option 1: Assignment of the OSCO for our company:

Assigned by: Name

OSCO name: Name

Department: Department

Phone number: Phone number

Email address: Email address

Beginning of the assignment: Date

End of the assignment: Date

Deputy in case of absence: Name and Email

Average week hours to dedicate to the OSCO role: Hours

Option 2: The current OSCO for our company is assigned at:

https://wiki.company.tld

#### VII Use Case 7: Distribution of a Linux kernel in an embedded system

This use cases describes the typical situation that we distribute embedded devices with a Linux kernel under GPL-2.0 and the GNU C Library under LGPL-2.1.

1. Provide the following text as part of the FOSS License Information:

This product contains third party Open Source Software and Free Software distributed under a number of different licenses (hereinafter referred to as "FOSS"). The respective licenses are listed here, and you can obtain comprehensive rights directly from the right holders to the extent specified therein. The FOSS licenses prevail over all other license conditions and contractual agreements with company name with regard to the corresponding FOSS components contained in the product.

- 2. Fulfill license obligations as given by the → Annex 1: "OSADL Open Source License Obligations Checklists" for the GPL-2.0 (role: PL). In particular the following aspects must be considered:
  - Provide a warranty disclaimer in a conspicuous way by accompanying the product with a note, a section in the manual or a pop-up window on the GUI containing the required information:

At the request of the copyright holders we point out the following: "This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details."

Extract and provide license texts of all licenses and copyright notices contained in the Linux kernel
 (→ Supplement 2: "How to scan") and deliver them with the product on a data carrier or on the
 embedded device itself. Notify the recipient of the embedded device where this information can be
 found.

### **Build your own FOSS policy**

The OSADL Open Source Policy Template is available as:

- **PDF** files on request at *info@osadl.org*:
  - A master document for the actual policy
  - Annexes and Supplements as separate files linked from the master document
  - (limitedly) editable versions without explanation boxes
- As **plain text** files on GitHub: github.com/osadl/foss-policy-template





#### **Disclaimer**

The OSADL Open Source Policy Template is intended as a **basis** for companies to create their **individual FOSS policy**.

Implementing a FOSS policy requires

- legal expertise
- (professional and legal) decision competence in the name of the company

The template does not replace these qualifications.



