



# OPENCHAIN

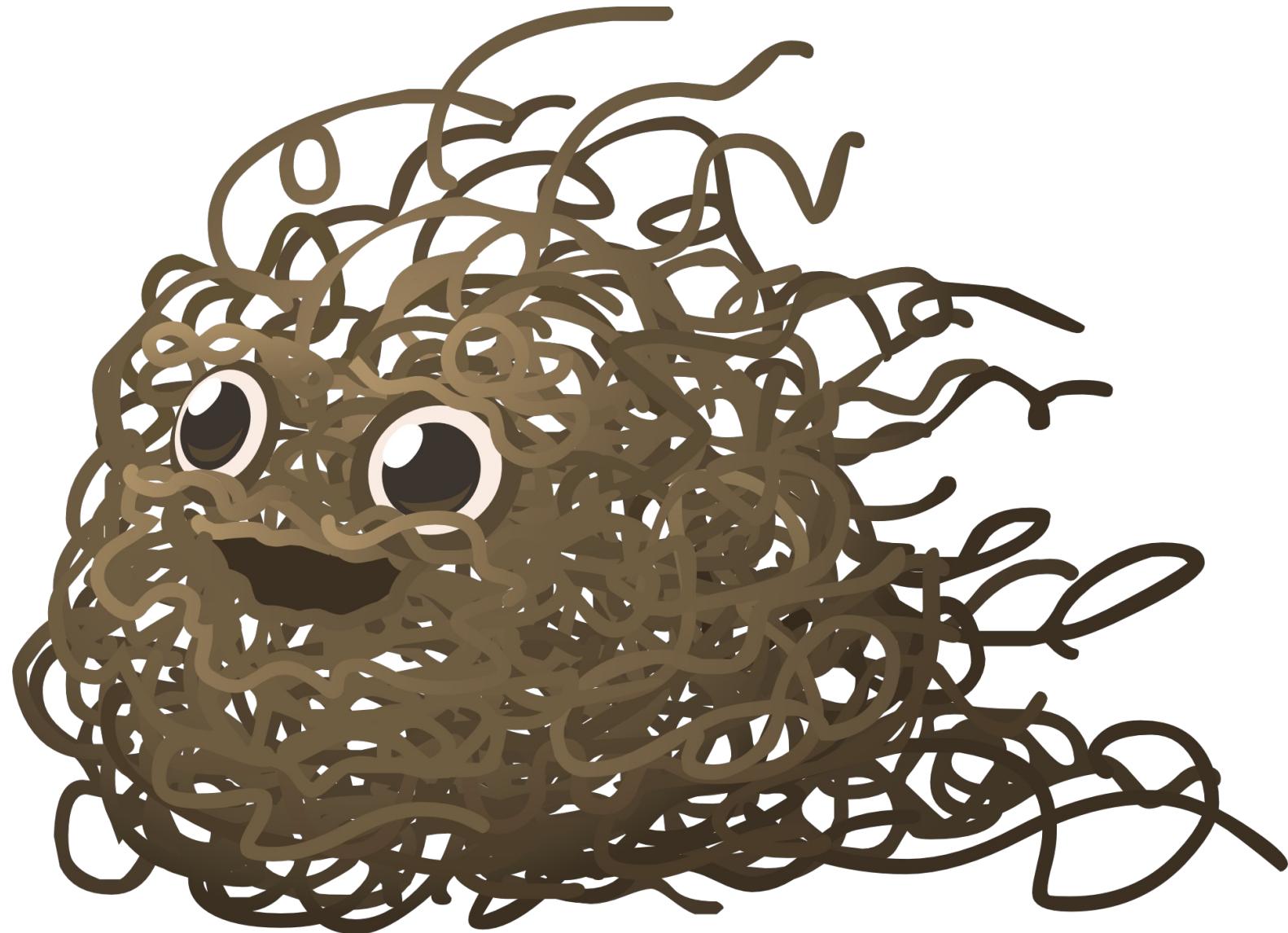
How The Linux Foundation Standards For License Compliance And Security Will Fix Your Supply Chain



# Our Mental Model Of The Supply Chain



# The Actual Supply Chain





OPENCHAIN

# 67.4%

of managers monitor their supply chain with Excel spreadsheets



OPENCHAIN

# 94%

of companies do not have full visibility of their supply chain

> 93%

of codebases use open source

53%

of codebases have license compliance issues  
(down from 65% in 2020)

81%

of codebases have security vulnerabilities



OPENCHAIN

# 40%

potential savings available via supply chain optimization

# 57%

of companies see supply chain management as a competitive edge

# 70%

of companies see supply chains as a driver for customer service

# Context: This Is Important To Business



Open Source License Compliance and Security Assurance  
is a key part of supply chain management.

# We Got Together To Improve The Supply Chain



arm



BMW  
GROUP  
BMW Car IT



CARIAD  
A VOLKSWAGEN GROUP COMPANY

CISCO

COMCAST

ERICSSON

FUJITSU

Google

HITACHI  
Inspire the Next

HONOR

HUAWEI

Meta

Microsoft

MOXA®

NEC

OPPO

Panasonic

Qualcomm  
Qualcomm Technologies, Inc.

SIEMENS

SONY

TOSHIBA

TOYOTA

Uber

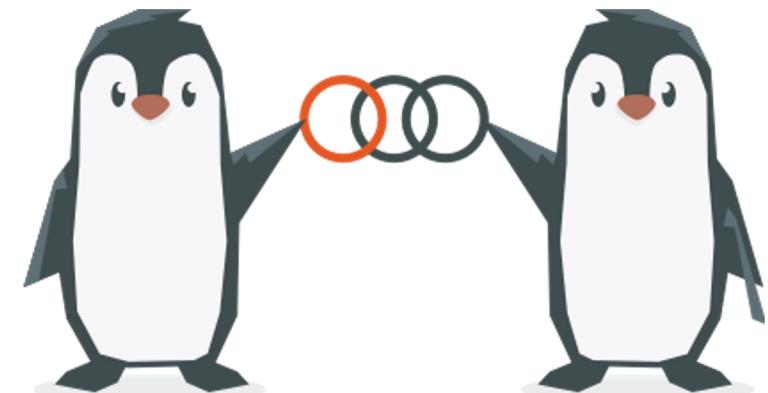


# OpenChain Membership – New (old) Faces!



(not an official VW ID.4)

# Members Represent Over 5.9 Trillion USD In Market Value



<https://docs.google.com/spreadsheets/d/1HlIBIFRkqiUc-6nnJWRkPd1VmiaeRknDIH6EnWYYLE/edit?usp=sharing>

# Broader Community

## Main Work Groups:

- Specification (Spring 2016~)
- Education (Autumn 2020~)

## Community Work Groups:

- Tooling (Summer 2019~)
- Export Control (Winter 2022~)
- Public Policy (Winter 2022~)

## Special Interest Groups:

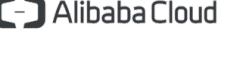
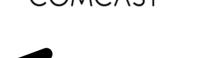
- Automotive (Summer 2019~)
- Telecom (Spring 2021~)

## Regional User Groups

- Japan (Dec 2017~)
- Korea (Jan 2019~)
- India (Sept 2019~)
- China (Sept 2019~)
- Taiwan (Sept 2019~)
- Germany (Jan 2020~)
- UK (June 2020~)
- USA (Dec 2020~)



# Example Verticals Impacted by OpenChain

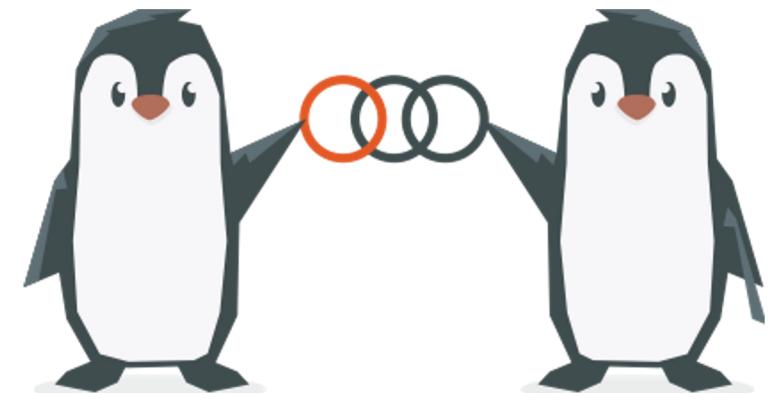
Automotive	Banking	Cloud	Consumer	Industrial	SaaS	Service	Silicon	Telco
 BMW GROUP BMW Car IT   BOSCH   CARIAD A VOLKSWAGEN GROUP COMPANY     HYUNDAI  HYUNDAI AutoEver  HYUNDAI MOBIS          	  	    	       	   Inspire the Next     	       	 Hitachi Vantara        	    Qualcomm Technologies, Inc.  	     

 Platinum Member / Conformance Pending  
  Platinum Member + ISO/IEC 5230 Conformant  
  ISO/IEC 5230 + DIS 18974 Conformant

This is a snapshot based on membership and select conformant organizations currently listed on our website. Total conformant numbers are far higher.

Example: [PwC Survey shows 20% of companies in Germany with over 2,000 employees already used ISO/IEC 5230.](#)

# Snapshoot Represents Over 7.5 Trillion USD In Market Value



<https://docs.google.com/spreadsheets/d/1HlIBIFRkqiUc-6nnJWRkPd1VmiaeRknDIH6EnWYYLE/edit?usp=sharing>

# Trillions More In Market Value Touched



Mercedes-Benz



HONDA



DENSO



This is a non-exhaustive list of participants on some of our community lists



(Lockheed co-chairs our spec development)



DENSO



This is a non-exhaustive list of participants on some of our community lists





OPENCHAIN

1,000+

Companies Working On A Better Supply Chain

# Trust Built By Process Management



- In Market Q4 2016~ (de facto) Q4 2020 (ISO/IEC)

## **OpenChain ISO/IEC 5230:2020**

The International Standard for open source license compliance.

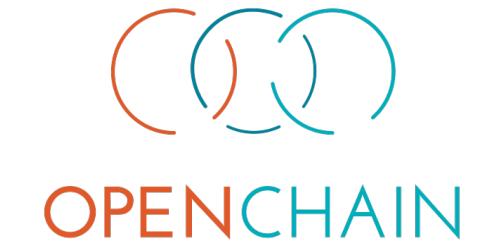
- In Market Q4 2022~ (de facto) Q3 2023 projected (ISO/IEC)

## **ISO/IEC DIS 18974, OpenChain Security Assurance Specification**

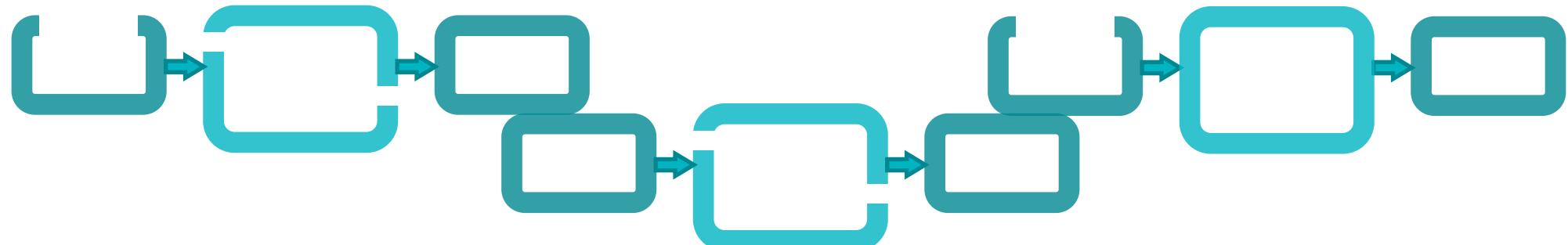
The de facto standard for open source security assurance compliance.

1. High level process standards;
2. Simple, effective and suitable for companies of all sizes in all markets;
3. Openly developed by a vibrant user community and freely available to all.

# The Standards Work Company By Company



Result = A More Predictable Supply Chain



# OpenChain Has 98 ISO/IEC 5230 Conformant Orgs Listed On Our Website (totals are higher)



# 20%

of German companies with over 2,000 employees  
already use OpenChain ISO/IEC 5230

# Recent Significant ISO/IEC 5230 Conformance



中国移动  
China Mobile

CLOUDERA

SOCIONEXT™



# Momentum Is Growing Around ISO/IEC DIS 18974

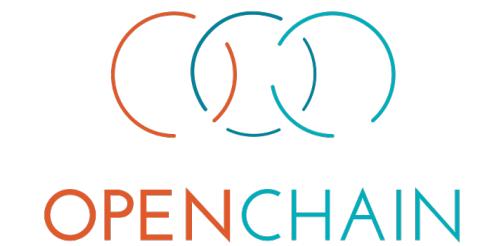
- We expect to complete the Draft International Standard (DIS) process via JTC-1 at the end of June.
- There will be an editorial period after this.
- According to Seth from Joint Development Foundation:

*“We will most likely end up passing with edits. We will clean up the editorial things but nothing technically normative and send it back. They will spend another month transposing the final version and give us the ISO number.”*

# Conformance Continues With De-Facto Standard



# Freedom Of Choice In Using Our Standards



1. Self-Certification
2. Independent Assessment
3. Third-Party Certification



# Free Self-Certification Material

## Section 1: Program foundation

- We have a policy governing the open source license compliance of Supplied Software.
- We have a documented procedure to communicate the existence of the open source policy to all Software Staff.
- We have identified the roles and responsibilities that affect the performance and effectiveness of the Program.
- We have identified and documented the competencies required for each role.
- We have documented the assessed competence for each Program participant.
- We have documented the awareness of our Program participants on the following topics:
  - The open source policy and where to find it;
  - Relevant open source objectives;
  - Contributions expected to ensure the effectiveness of the Program;
  - The implications of failing to follow the Program requirements.
- We have a process for determining the scope of our Program.
- We have a written statement clearly defining the scope and limits of the Program.
- We have a documented procedure to review and document open source license obligations, restrictions and rights.

## Section 2: Relevant tasks defined and supported

- We assigned individual(s) responsibility for receiving external open source compliance inquiries.
- The external open source compliance contact is publicly identified (e.g. via an email address or the Linux Foundation Open Compliance Directory).
- We have a documented procedure for receiving and responding to open source compliance inquiries.
- We have documented the persons, group or function supporting the Program role(s) identified.
- We have ensured identified Program roles been properly staffed and adequately funded.
- Legal expertise to address internal and external open source compliance has been identified.
- We have a documented procedure assigning internal responsibilities for open source compliance.



# OpenChain Has 11 Official Third-Party Certifiers



ESI China Electronics Standardization Institute



# OpenChain Has 27 Official Service Providers

{metæffekt}

Alektō *Metis*  
...we enable digital innovation.

bitsea.

C/C CYBELLUM



FOSSAware

Hitachi  
Solutions

LYRA  
Infosystems

NTT DATA  
Trusted Global Innovator

OSLN

Open  
Source  
Sense

opsequo

ORCRO

OSADL

OSPOCO

OSS  
CONSULTANTS

pwc

SeQuenX  
Software Quality Engineering Excellence

SOFTWARE COMPLIANCE  
ACADEMY

SOURCE  
Auditor  
"Keeping Your Source Code Yours"

Source Code Control  
Open Source Risk Management Specialists

SYNERGON  
YOUR IP DEPARTMENT

SYNOPSYS®

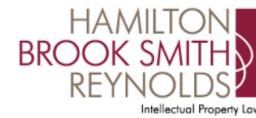
TIMETOACT  
SOFTWARE & CONSULTING

TogánLabs

webpartner  
kommunikationsdienste GmbH

wipro

# OpenChain Has 22 Official Legal Providers



理慈 Lee, Tsai & Partners



South Toranomon Law Offices



taylor | english



# OpenChain Has 12 Official Tooling Vendors

C/C CYBELLUM

**FOSSA**

**FQSSID**

**MEND**

**onward  
SECURITY**

 **SCANOSS**

 **SCANTIST**

 **SECTREND**

 **sonatype**

**SYNOPSYS®**

**Trust  
Source** 

 **悬镜  
XMIRON**

# Example Reference Material - Online Training



**Introduction to Open  
Source License  
Compliance  
Management (LFC193)**

**Implementing Open  
Source License  
Compliance  
Management (LFC194)**

1. LFC193 - 1209 total enrollments (398 digital badges issued)  
4.65 out of 5 rating by users
2. LFC194 - 579 total enrollments (138 digital badges issued)  
4.55 out of 5 rating by users

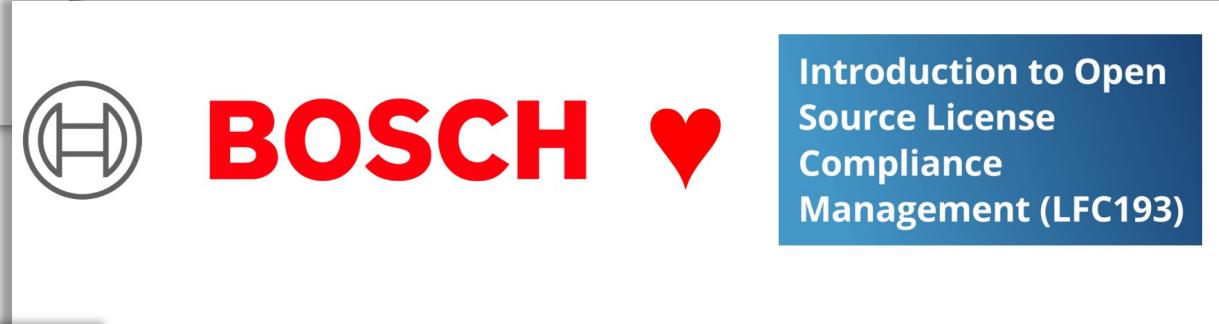


# Example Of Market Use



**Introduction to Open  
Source License  
Compliance  
Management (LFC193)**

Continental made LFC193 a required course  
for their software developers from late Q3



**Introduction to Open  
Source License  
Compliance  
Management (LFC193)**

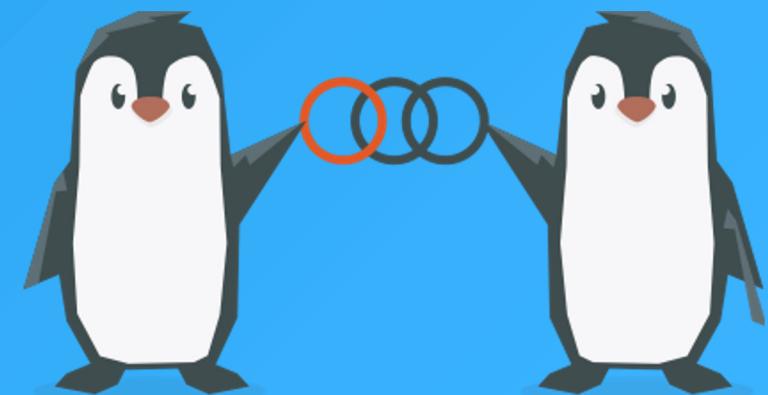
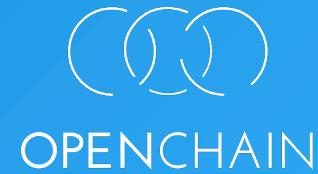
Bosch has asked suppliers and requires  
external developers to use LFC193 since Q4 2021



**Introduction to Open  
Source License  
Compliance  
Management (LFC193)**

KPMG AG asks their developers  
and architects to complete LFC193

# What Else Is Happening?



# General Community News: Project Improvements

## ISO/IEC 5230 One Pager Updated

By Shane Coughlan | 2023-03-09 | Featured, News

The ISO/IEC 5230 one page overview has been updated to provide simple, clear messaging about how and why the International Standard for open source license compliance provides value to companies in the supply chain.

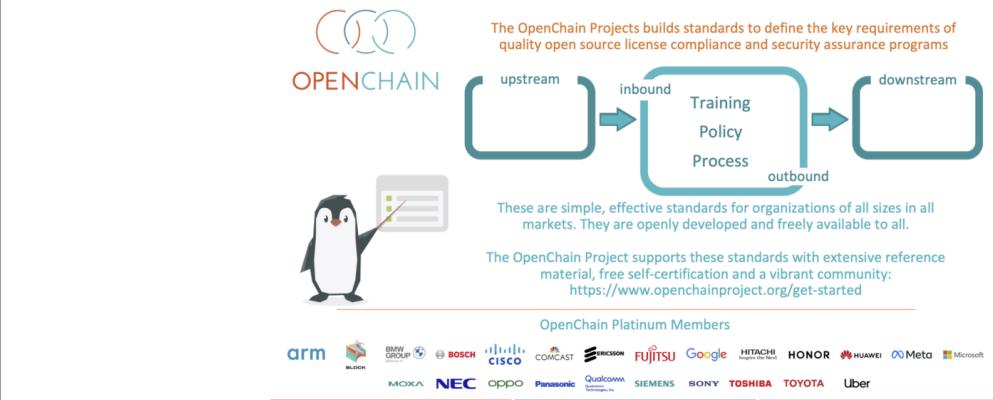
This document is available in [PDF format](#), [PNG format](#) or [InDesign format](#). You may take it, use it, share it and remix it freely using the terms of the [CC0 license](#), effectively public domain.

You can help us improve this document, translate it and convert it into new formats through the [OpenChain GitHub Reference Library](#). We are actively seeking a Markdown version for ease of future iteration.



## OpenChain Project One Slide Overview Updated

By Shane Coughlan | 2023-03-10 | Featured, News



The one slide overview of the OpenChain Project has been updated to provide simple, clear messaging about how and why our work provides value to companies in the supply chain.

# General Community News: Project Improvements

## Improved OpenChain Community Calendar

By Shane Coughlan | 2023-02-27 | News

The screenshot shows a calendar interface with the following events listed:

- Tuesday, May 9**
  - 07:00 Automation & SBOM 合同ミーティング (OpenChain Japan-WG)
  - 21:30 OpenChain Mini-Summit - Co-Located with Open Source Summit North America - Vancouver (14:00 to 17:00 Pacific)
- Thursday, May 11**
  - 16:00 OpenChain Education Work Group Call
- Friday, May 12**
  - 06:00 OSPO Local Meetup - Japan (Japanese Speaking)
- Tuesday, May 16**
  - 01:00 OpenChain Monthly Community Call - 09:00 CST (01:00 UTC) on 3rd Tuesday
- Wednesday, May 17**
  - 16:00 OpenChain Automation Work Group - Third Wednesday Meeting
- Thursday, May 18**
  - 06:00 OpenChain Japan Work Group @ NEC
- Thursday, May 25**
  - 16:00 OpenChain Legal Work Group Meeting - Model Provisions for Procurement Discussions and Contracts
  - 17:00 OpenChain Education Work Group Call
- Friday, May 26**
  - 06:00 OSPO Local Meetup - Japan (Japanese Speaking)
- Thursday, June 1**
  - 07:00 OpenChain Telco Work Group Monthly Meeting - Morning
  - 15:00 OpenChain Telco Work Group Monthly Meeting - Afternoon
- Wednesday, June 7**
  - 08:00 OpenChain Automation Work Group - First Wednesday Meeting

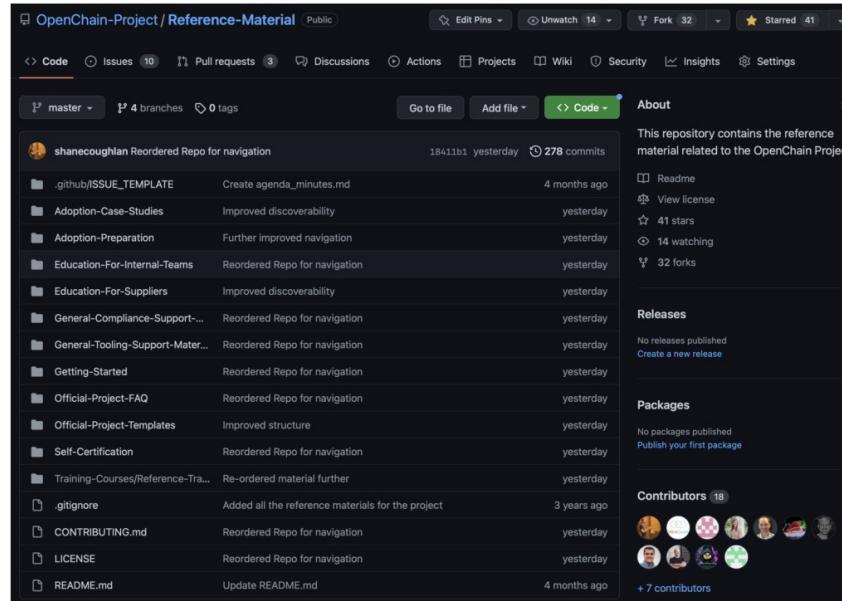
Events shown in time zone: Coordinated Universal Time [+ Google Calendar](#)

The OpenChain Community Calendar has been revamped to make it much easier to find and attend our events. The new calendar view is in list format and is now present on both our landing page and our participation page.

# General Community News: Project Improvements

## OpenChain Reference Library – Complete Overhaul

By Shane Coughlan | 2023-02-24 | Featured, News



The OpenChain Reference Library has been significantly updated to improve navigation. This is an administrative item that was pending for a while. Its completion should make it possible (and easy!) for anyone to access our library and find material. It should also make it a lot easier for our Education Work Group to assess and improve or expand existing material.

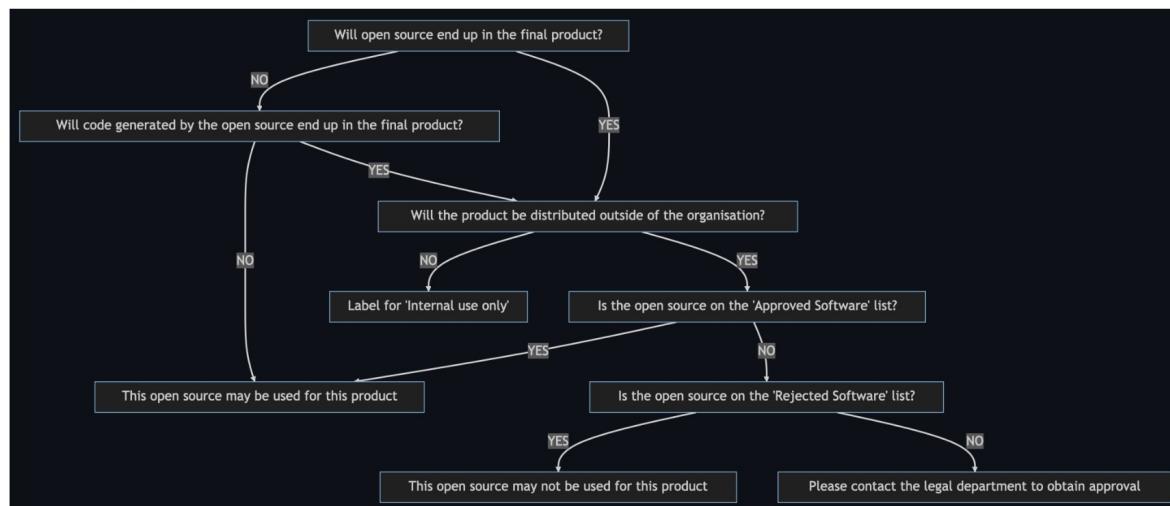
# General Community News: Project Activities

## GPLv2 Compliance Flowcharts Updated

By Shane Coughlan | 2023-04-13 | News

The OpenChain Project GPLv2 Compliance Flowcharts have been updated. Originally published in the book [Practical GPL Compliance](#), these flowcharts are intended to help address some common compliance workflows. Thanks to Jacob Wilson, they have been moved into MarkDown format, and can now be easily added to websites, elearning platforms and more.

### Example: Flowchart #0 – How Do I Distribute



You can access and download these flowcharts in our Reference Library. Like the rest of our material, they are released under CC-0 licensing.

# General Community News: Webinars

## OpenChain Webinar #51 – An Update On ClearlyDefined

By Shane Coughlan | 2023-04-26 | News, Webinar



OpenChain Webinar #51 featured an update on [ClearlyDefined](#) by Nick Vidal at the Open Source Initiative (OSI). A lot has happened since we last covered this project for open source metadata, including the move to a new home at OSI.

# General Community News: Events

## OpenChain @ Legal and Licensing Workshop 2023 – Gothenburg, Sweden – 2023-04-21

By Shane Coughlan | 2023-04-21 | News



The OpenChain Project was featured at the FSFE Legal and Licensing Workshop 2023 held in Gothenburg, Sweden during April. This annual event brings together legal experts from around the world to talk about open source and open-related legal matters.

## OpenChain @ 2nd China Automotive Cyber Security and Data Security Conference 2023

By Shane Coughlan | 2023-04-20 | News



The OpenChain Project has been featured at the 2nd China Automotive Cyber Security and Data Security Conference 2023 in a talk delivered by Zhang JunXia of CAICT. This is part of our long-running collaboration to help companies of all sizes in the Chinese market to adopt and use ISO/IEC 5230, the international standard for open source license compliance.

# General Community News: Publications

## OpenChain ISO/IEC Featured In Journal Of Software (软件学报)

By Shane Coughlan | 2023-03-13 | Featured, News

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OpenChain ISO/IEC 5230:2020 is featured positively in the 'Survey on Open-source Software Supply Chain Security' published in the [Journal Of Software \(软件学报\) Volume 33, Issue 3, 2023](#).

This article by JI Shou-Ling, WANG Qin-Ying, CHEN An-Ying, ZHAO Bin-Bin, YE Tong, ZHANG Xu-Hong, WU Jing-Zheng, LI Yun, YIN Jian-Wei and WU Yan-Jun is worth reading in full for insight from a key market space for open source.

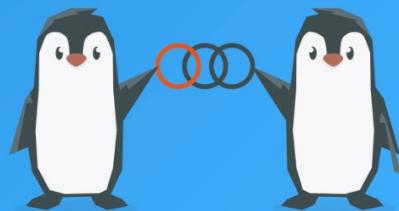
# General Community News: Asking Questions

## OpenChain Industry Survey 2023

By Shane Coughlan | 2023-04-03 | Featured, News

# OpenChain Industry Survey 2023

A Better Understanding Of The Open Source Supply Chain



### **The OpenChain Industry Survey 2023 is now online.**

Our annual OpenChain Industry Survey covers a big topic: the global status of corporate engagement and management of open source. It focuses on a 'strategy' perspective rather than a 'development' perspective. Our goal is to help inform corporate project, product and supply chain decisions in the year ahead.

# Licensing and Security Specification Editing

- The editing process is continuing as expected, with solid feedback on issues, and changes heading in the direction of improved clarity.
- The open and closed issues are tracked via GitHub:
  - Licensing: <https://github.com/OpenChain-Project/License-Compliance-Specification/issues>
  - Security: <https://github.com/OpenChain-Project/Security-Assurance-Specification/issues>
- The draft next generation specifications are also hosted on GitHub:
  - Licensing: <https://github.com/OpenChain-Project/License-Compliance-Specification/blob/master/3.0/en/openchain-license-compliance-3.0.md>
  - Security: <https://github.com/OpenChain-Project/Security-Assurance-Specification/blob/main/Security-Assurance-Specification/2.0/en/openchain-security-specification-2.0.md>
- As are the slides used for every meeting (two meetings per month):  
<https://github.com/OpenChain-Project/Meeting-Minutes/tree/main/Slides>

# Model Language For Procurement

- The first meeting of the Legal Work Group took place on the 25th of April 2023.
- We explored model provisions for including OpenChain ISO/IEC 5230 and OpenChain ISO/IEC DIS 18974 (and potentially other standards) in procurement contracts or similar material. The goal is to ensure people can understand options. We will not be prescriptive, and these model provisions will remain part of the OpenChain reference material. They will not be included in the standards themselves.
  - The call started by looking at model provisions done before via the [Risk Grid](#).
  - The document, under public domain, has been [moved to the OpenChain GitHub](#) for ease of access and editing.
- Our outcome was to use this basic format to structure our first round of model provisions, and to have the option of merging the documents in the future.

Be Part Of This



<https://www.openchainproject.org/participate>