



# SPDX™ Beta Orientation

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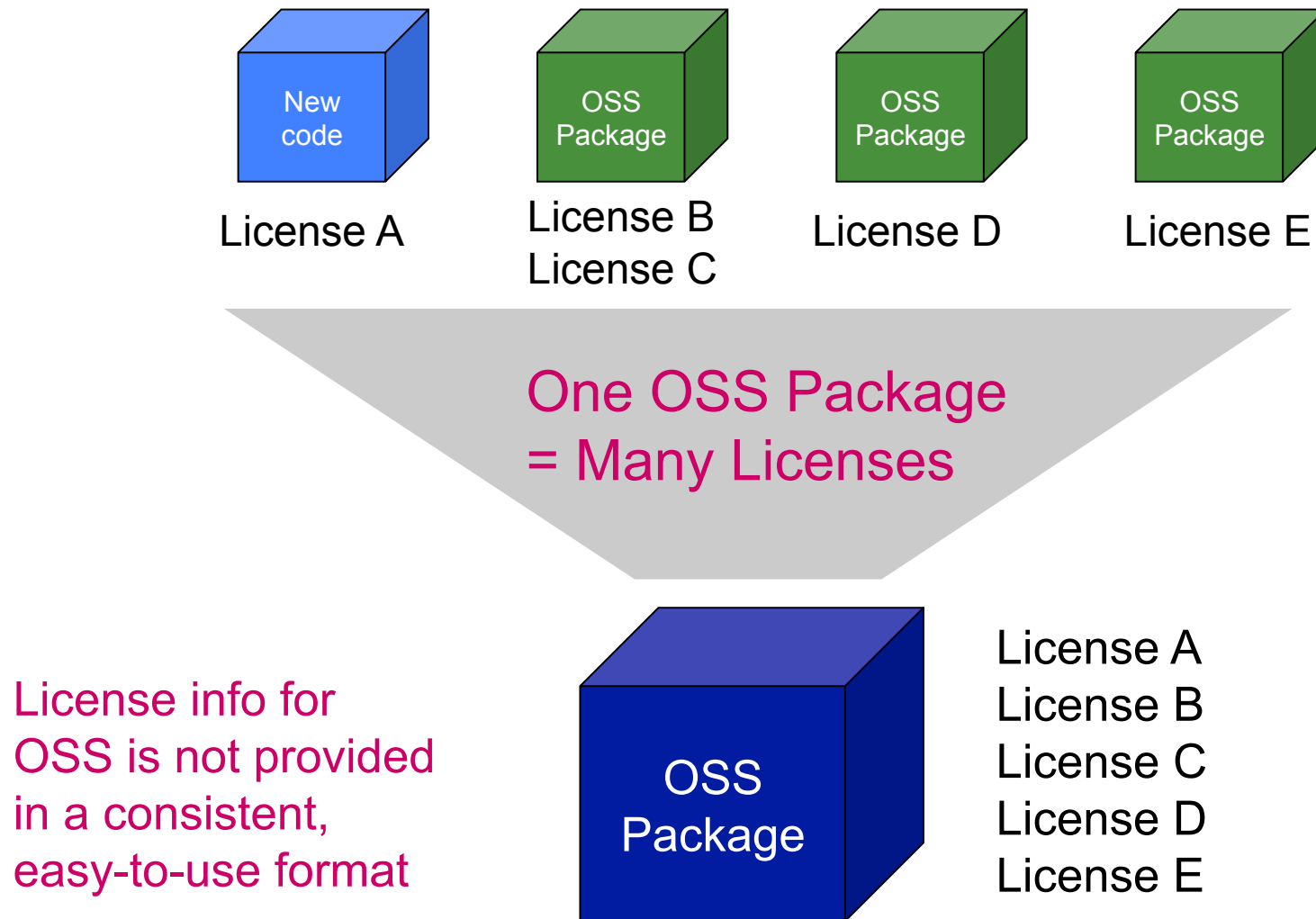
# Agenda

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- Overview of SPDX
- About the Beta Program
- Tools to Help

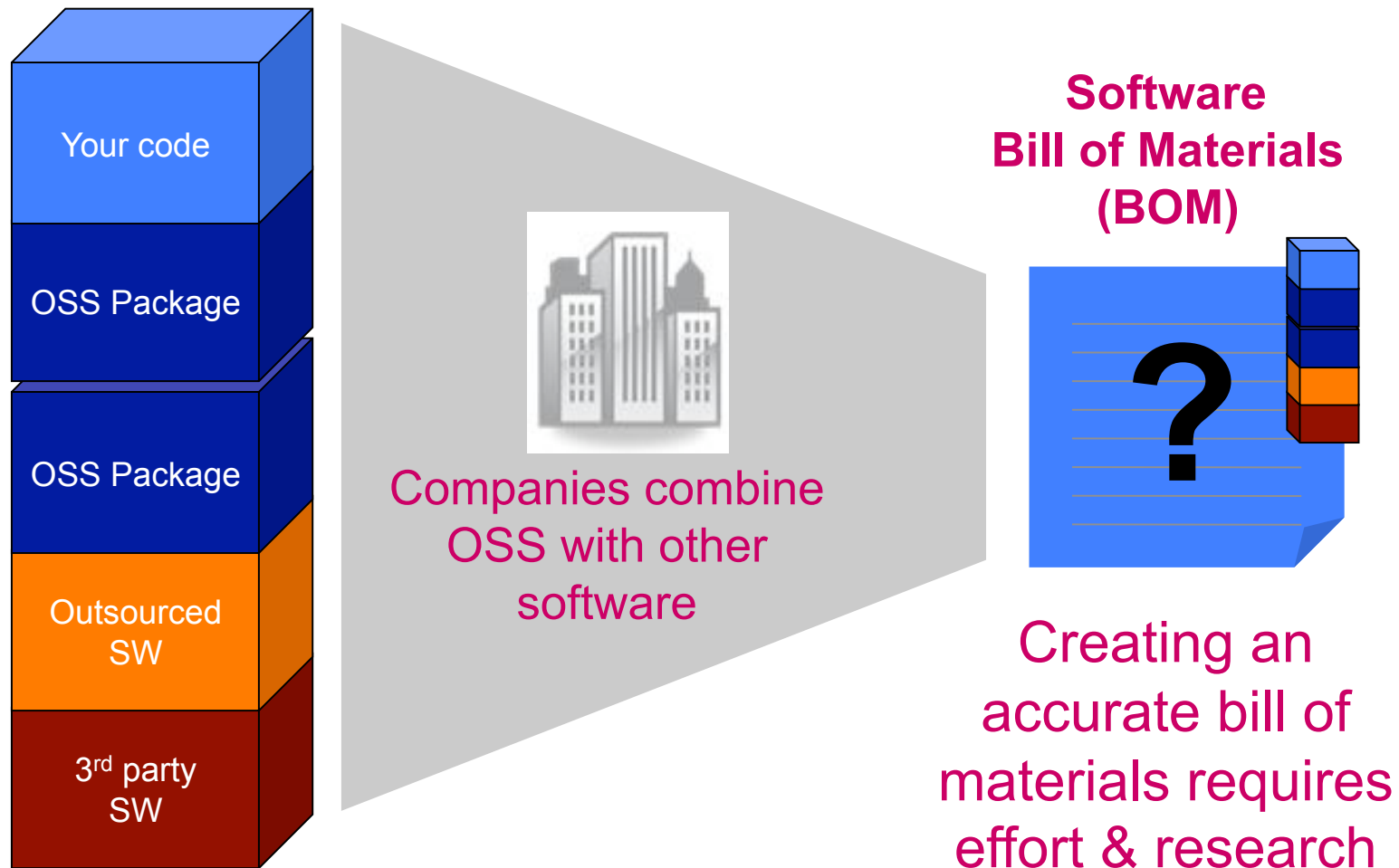


# Open Source Compliance: The Challenge



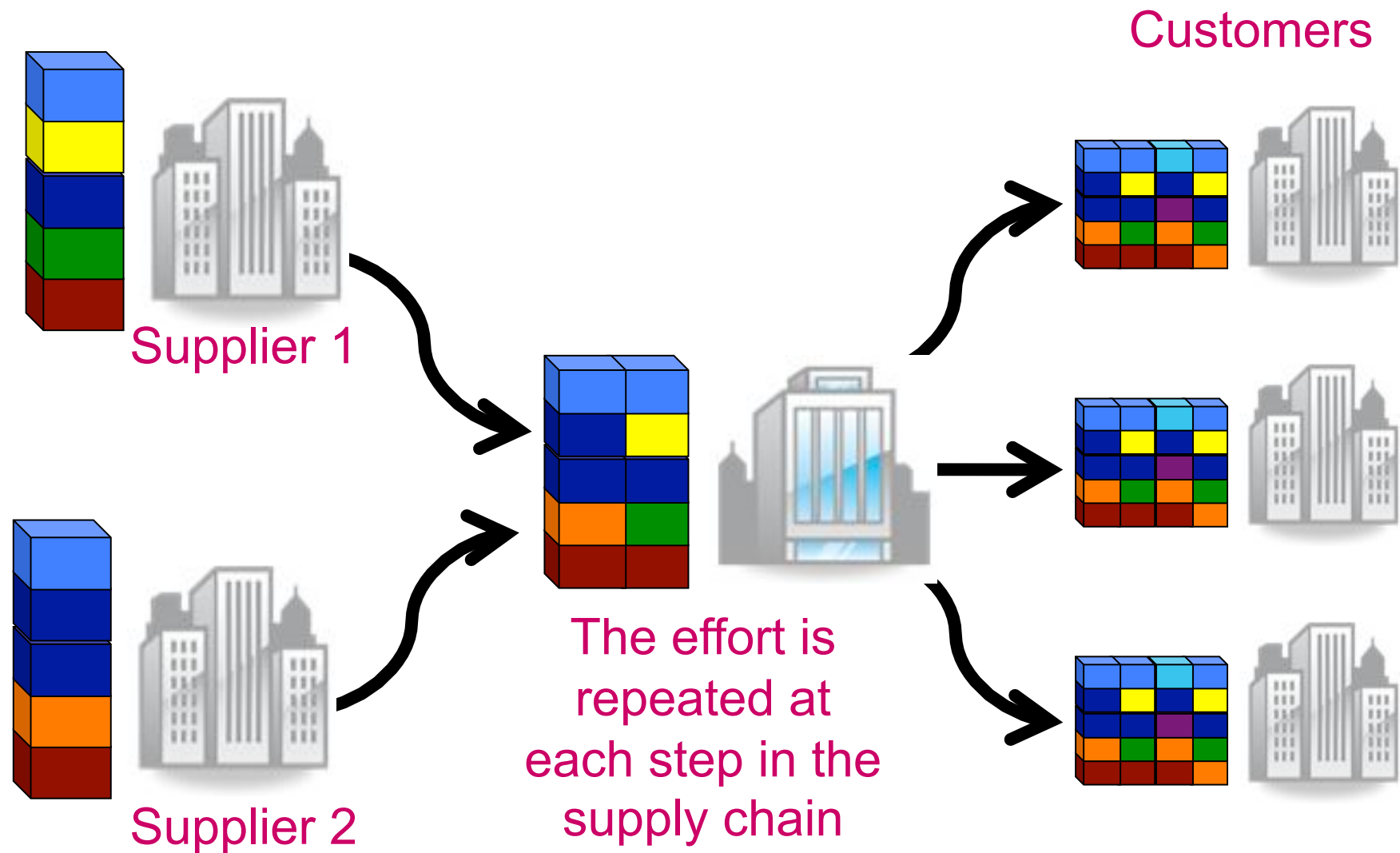


# Open Source Compliance: The Challenge





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# Software Package Data Exchange™ (SPDX™)

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- **SPDX™** - A standard format for communicating the components, licenses and copyrights associated with a software package.
- Key pillar in Linux Foundation's Open Compliance Program





## Benefits

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- Reduce burden of providing information in different formats for different consumers
- Avoids redundancy where packages are re-analyzed
- Enable better compliance with open source licenses



# The SPDX™ Specification

- Describes the format for the file and the data to be included

## 2. Identification Information

One instance of the Identification Information is required per package instance.

Fields:

### 2.1 SPDX Specification Version Number

- 2.1.1 **Purpose:** Provide a reference number that can be used to understand how to parse and interpret the rest of the file. It will enable both future changes to the specification and to support backward compatibility. The version number consists of a Major and Minor version indicator. The Major field will be incremented when one or more sections are created, modified or deleted. The Minor field will be incremented when either only the fields within a section are modified or standard recognized licenses are added to appendix.
- 2.1.2 **Intent:** Here, parties exchanging Identification Information in accordance with SPDX specification need to provide 100% transparency as to which SPDX specification such Identification Information is conforming to.
- 2.1.3 **Cardinality:** Mandatory, single instance
- 2.1.4 **Tag:** SPDXVersion
- 2.1.5 **RDF:** /RDF/SPDXDoc/SPDXVersion
- 2.1.6 **Data Format:** SPDX-M.N **where:** M is Major version number, N is minor version number.
- 2.1.7 **Example:** SPDXVersion: SPDX-1.0





## The SPDX™ File

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Identification Info

Source of this SPDX™ file

Package Info

Associates an SPDX™ file with a software package (tarball, zip, archive)

Non-Standard  
Licenses

Text of licenses that are not in the SPDX™ standard list

Per File Info

License and copyright info associated with each file

Reviewer Info

Optional reviewer signoff



# The SPDX™ List of “Standard Licenses”

## SPDX™ license repo

License Identifier	Recognized Exceptions	Full name of License
AFL-3.0		Academic Free License 3.0
AGPL-3.0		(GNU) Affero General Public License v3
APL		Adaptive Public License
ASL-2.0		Apache License, 2.0
APSL-2.0		Apple Public Source License 2.0
Artistic-2.0		Artistic license 2.0
AAL		Attribution Assurance License
BSD-4-Clause		BSD 4-clause "Original" or "Old" License
BSD-3-Clause		BSD 3-clause "New" or "Revised" License
BSD-2-Clause		BSD 2-clause "Simplified" or "FreeBSD" License
BSL-1.0		Boost Software License 1.0
CATOSL-1.1		Computer Associates Trusted Open Source License 1.1
CC-BY-1.0		Creative Commons Attribution 1.0
CC-BY-NC-1.0		Creative Commons Attribution Non Commercial 1.0
CC-BY-ND-1.0		Creative Commons Attribution No Derivatives 1.0
CC-BY-SA-1.0		Creative Commons Attribution Share Alike 1.0
CC-BY-NC-ND-1.0		Creative Commons Attribution Non Commercial No Derivatives 1.0
CC-BY-NC-SA-1.0		Creative Commons Attribution Non Commercial Share Alike 1.0
CC-BY-2.0		Creative Commons Attribution 2.0
CC-BY-NC-2.0		Creative Commons Attribution Non Commercial 2.0
CC-BY-ND-2.0		Creative Commons Attribution No Derivatives 2.0
CC-BY-SA-2.0		Creative Commons Attribution Share Alike 2.0
CC-BY-NC-ND-2.0		Creative Commons Attribution Non Commercial No Derivatives 2.0
CC-BY-NC-SA-2.0		Creative Commons Attribution Non Commercial Share Alike 2.0

List of most common licenses

Include common exceptions

Standardized license names

Exact text of licenses  
Available on SPDX™  
website – URLs won't  
change



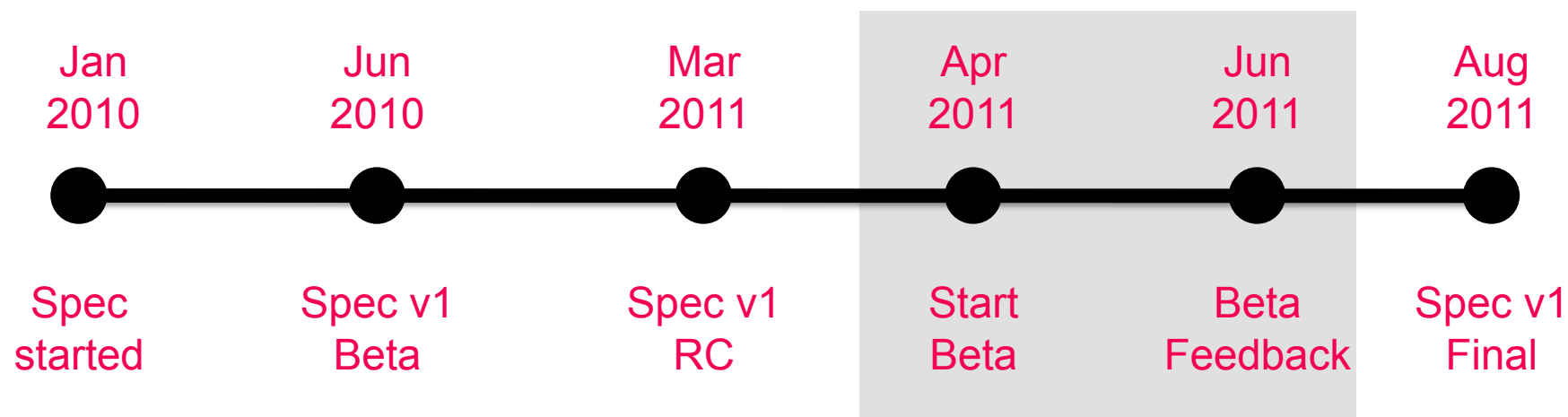
# SPDX<sup>TM</sup> BETA PROGRAM



The SPDX Beta Program  
is designed to ensure the  
SPDX specification meets  
your needs



## Timeline



Beta Testing between Apr and Jun 2011



## Beta Process



Company 1

- Create your SW BOM
- Convert to an SPDX file



Company 2

- Convert from SPDX
- Review SW BOM

Tools will be provided to convert to/from SPDX



## Feedback We Need

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- How well did the SPDX format cover information you need to exchange?
- What was effort involved in converting to/from SPDX format?
- Did the SPDX format help you understand what was in the software?
- How did the standard license information work for you?
- Can you see how using SPDX could save your organization time/money?
- Are any changes needed to make SPDX meet your needs?
- What other tooling is needed for SPDX?



## How We Will Help

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- **Beta Coordinator**
  - Designated SPDX community member to work with you to define and manage the beta plan
  - Regular calls with your team throughout Beta process to address your issues and provide feedback
- **Beta Support Team**
  - Technical, business and legal group ready to respond quickly to questions and issues
- **Training**
  - Web meeting based training to familiarize you with SPDX spec and tools
- **Documentation**
  - How-to guide for creating and reading SPDX and using tools





# Sample Beta Project Plan

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- Week 1
  - Beta Kickoff & Training (2 hrs)
    - Meeting with your team and trading partner team to identify project and define plan, schedule, tasks etc
    - Training via web conference
- Weeks 2-3
  - Supplier to create SPDX from BOM
  - Resolve any issues
  - Weekly check-ins with Beta coordinator
- Weeks 4-5
  - Receiver to review SPDX
  - Resolve any issues
  - Weekly check-ins with Beta coordinator
- Week 6
  - Debrief with entire team



## Beta Roles

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- Project Leader
  - Person responsible for coordinating Beta program
- BOM creator
  - Person using your normal processes to create BOM
- SPDX translator
  - Person that will use tools to turn spreadsheet BOM into SPDX file and vice versa. Should be technical.
- Legal (Supplier & Recipient)
  - To review SPDX info



## Suggested Project Roles

Supplier

Project  
Leader

BOM  
creator

SPDX  
translator

Legal  
reviewer

Recipient

Project  
Leader

SPDX  
translator

BOM  
reviewer

Legal  
reviewer



## Marketing Requests

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- Ability to name company as a SPDX Beta site
- Include quotes on SPDX web site or in press releases
- Possible reference for press or analysts



- Spec
  - Creative Commons Attribution License 3.0
- Data
  - TBD
- Tools
  - Primary License – MIT
  - Libraries – BSD 3 Clause and Apache 2.0



## Wrap Up

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- Next Steps
  - Confirm participation
  - Identify a trading partner
  - Identify a project
  - Review SPDX specification
- Questions?



- Objectives:
  - Reduce the effort of creating, consuming and validating SPDX Documents
  - Provide a translation from the technical document (e.g. RDF/XML or tag-value format) and a more readable format
  - Provide a mechanism for validating SPDX documents
  - Enable contributions and review of the tool implementation by the broader technical community through open source licensing



## SPDX Viewer

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- Command line driven Java application which formats a valid SPDX document into a text file
- Validates the SPDX document and provides somewhat detailed error messages when there are parsing errors
- Status: Currently being updated to the latest specifications. Will be available for Beta.





## SPDX Translator

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- Converts a spreadsheet containing SPDX information into a valid SPDX/RDF file
- Converts a valid SPDX/RDF file into a spreadsheet
- Java based command line tool
- Requires the spreadsheet be in a very specific format
- A spreadsheet template with the specific column names and order will be provided as part of the tool
- Status: In development. Will be available for Beta.



## Technical Info in the SPDX Spec

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- **OWL Document**
  - Specifies the RDF for the SPDX document
  - Can be used to generate your own RDF parsers and tools
- **Tag-Value Grammar**
  - Specifies the grammar for the SPDX tag value format
  - Can be used to generate your own tag-value parsers and tools



## Contributing to SPDX Tools

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- A GIT repository for SPDX tools can be found at:  
<http://git.linuxfoundation.org/pretty-printer.git/>
- Contributions and suggestions are welcome.
  - Report any defects or suggest any improvements to bugs.linux-foundation.org product:spdx (you can sign up for a bugzilla account at bugs.linux-foundation.org)
  - Email [spdx-tech@fossbazaar.com](mailto:spdx-tech@fossbazaar.com)