European Standardization Organizations

Workshop: Stakeholder Group **Developers**, including those in Open Source communities

2021-10-13 | Project 4: Open Source Solutions

Agenda

- Welcome (5 mins)
- Project summary (15 mins)
- Technical solutions (20 mins)
- Processes (20 mins)
- Participation and Funding (20 mins)
- Licensing and IPR (20 mins)
- Next steps (10 mins)

Welcome

Amanda Saunders| BSI (UK) | Workshop host

Purpose

Target audience

▶ Software developers from commercial businesses and OS communities

Goals of today's session

▶ Explore incentives and motivation for developers, including those from Open Source communities, to participate with standardization

▶ Investigate how standardization can benefit from the skills, tools and Agile development processes from Open Source Communities via joint participation on CEN-CLC Open Source Solutions.

Other upcoming sessions

Date & Time	Target Audience	Topics
Tue 19 Oct 2021 from 10am to 12pm CET	**Members** (various departments, including standardization, publishing and legal)	Workshop – inc. processes, technical tools, licensing and commercials
Fri 15 Oct 2021 from 10am to 12pm CET	**Open source communities** (people who work at the community head offices)	Workshop – inc. processes, technical tools, licensing and commercials
Thu 14 Oct 2021 from 10am to 12pm CET	**Standards users** (those who aren't involved in standards making)	Workshop – inc. processes and technical tools

Current list and registration links are on the project site (CEN/CENELEC)

Presenters

Amanda Saunders
BSI (UK)
Workshop host

Shannon Kiernan
CCMC (Europe)
Joint Project Leader

Derek Roche
SESKO (Finland)
Technical Solutions Workstream Leader

Camille Cloître
AFNOR (France)
Operationalization Workstream Leader

Adrian O'Sullivan
NSAI (Ireland)
Business Model Workstream Leader

Jasnam Channe
BSI (UK)
Business Model Workstream Member

Practicalities

Speak up ☺

- ▶ Informal (but efficient)
- ▶ Use the Q&A panel anytime if you'd like the project team to answer (answered later if we run out of time)
- ▶ Use chat freely if you don't need the project team to answer
- ▶ Zoom polls
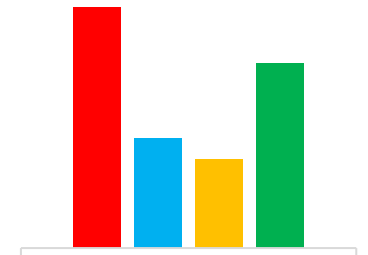- ▶ Silence ≠ agreement

Materials afterwards

- ▶ Slides and Q&A on public project site (CEN/CENELEC)
- ▶ Minutes via email to attendees
- ▶ Meeting not recorded

Who is joining us today?

▶ Who do you work for?

▶ What type of skills/role do you have?

▶ Why did you decide to join?

▶ Is this your first session?

Project summary

Shannon Kiernan | CCMC (Europe) | Joint project leader
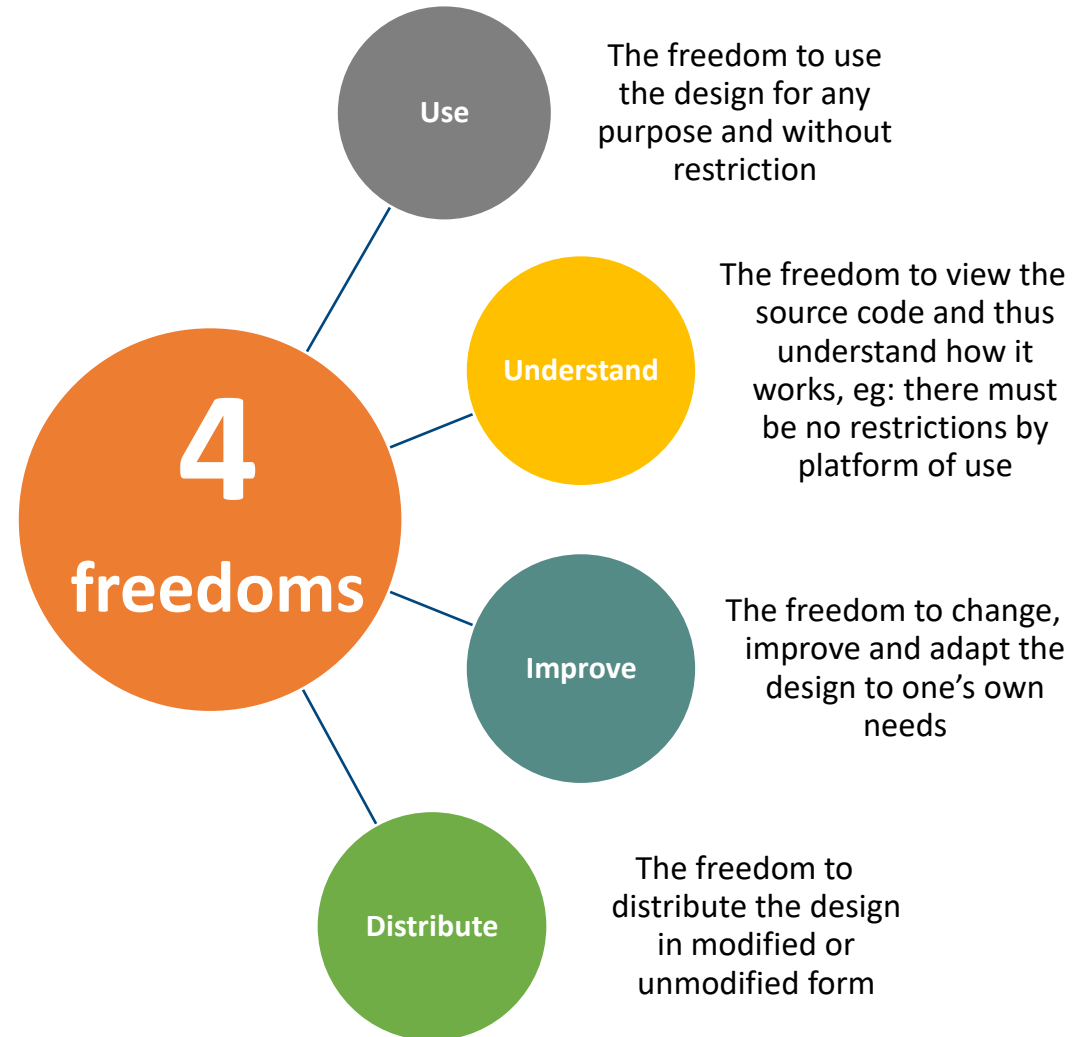
CEN Project 4 – OS Solutions (OSS)

▶ To facilitate the incorporation of open source approaches into CEN-CENELEC's standardization activities in order to keep standards relevant in the digital era.

Our understanding of open source

A design (eg: software) issued under a licence that satisfies certain criteria.

The detailed version:
Open Source Definition
https://opensource.org/osd

But the basic idea is…

4 freedoms

Use
The freedom to use the design for any purpose and without restriction

Understand
The freedom to view the source code and thus understand how it works, eg: there must be no restrictions by platform of use

Improve
The freedom to change, improve and adapt the design to one's own needs

Distribute
The freedom to distribute the design in modified or unmodified form

Examples in standardization

Electronic Invoicing

▶ **Reference implementation**

A software tool that produces invoices that conform with an EN
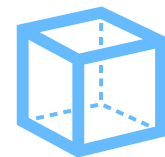
▶ **Testing tool**

A software tool where you import an invoice and the tool tells you whether it conforms with an EN

Industry 4.0

Software to operate a sensor array that produces interoperable data in conformity with an EN

Hardware

Design for a 3D printer that conforms with an EN

Common misunderstandings

Open Source costs nothing €

People often think... since many open source projects are developed publicly in a community, then open source should not cost anything.

But really... the sale of open source designs is very much permitted and a common business model, although in practice it is almost always sold as a package along with something else like hardware or support services.
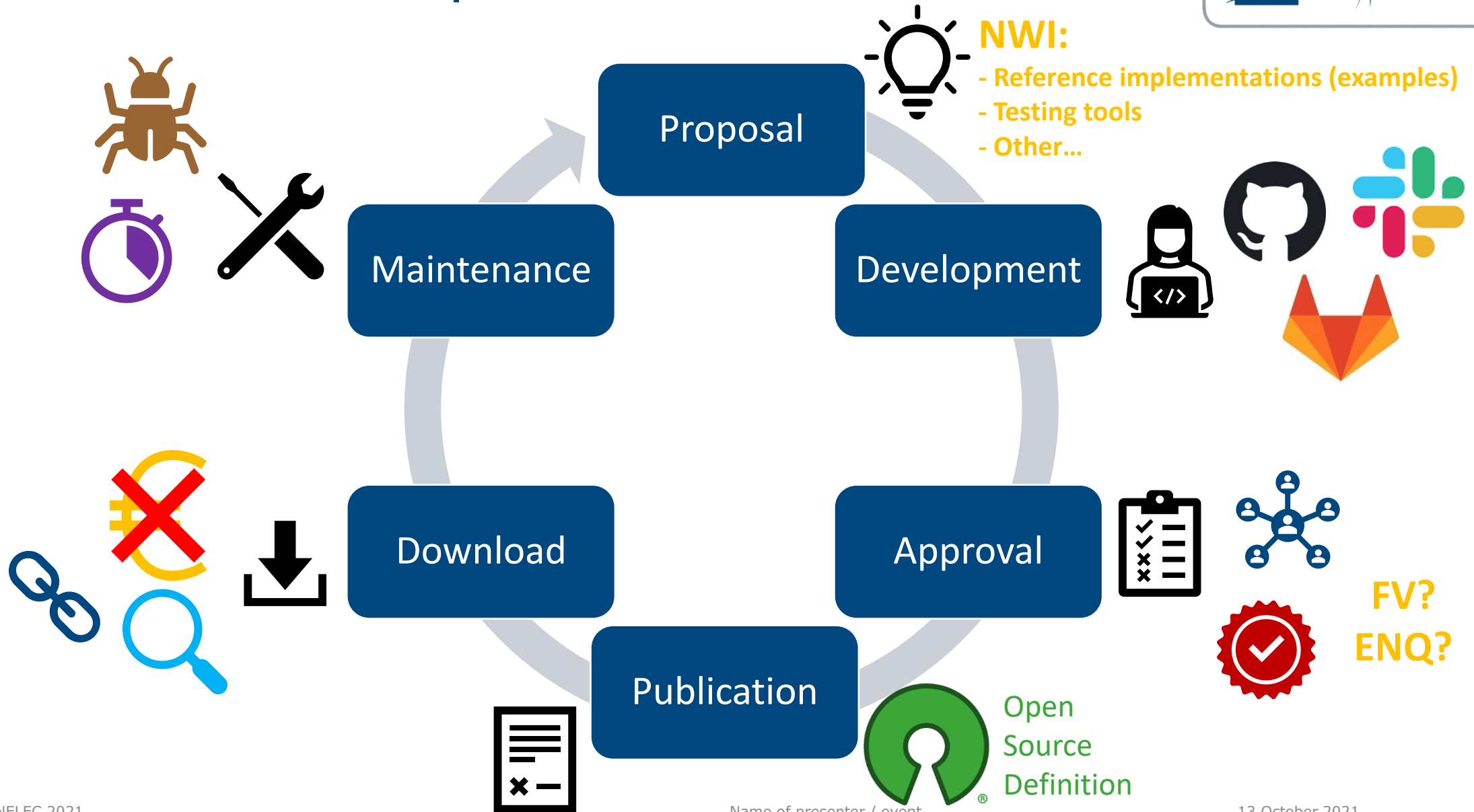
You have to return/publish changes

People often think... you have to "give back to the community" or publish changes you make to the code, especially with copyleft licences.

But really... this is a possibility, but not an obligation. It is very much allowed to make private modifications and never share them. Very often, however, companies decide to share with the community anyway, as this can make economic sense.

A framework for Open Source deliverables

NWI:
- Reference implementations (examples)
- Testing tools
- Other...

Proposal

Development

Maintenance

Download

Approval

Publication

Open Source Definition

FV? ENQ?

To avoid confusion…

In scope:

✔ First version of a framework for a new type of deliverable

Out of scope:

✘ changes to deliverables that are already published

✘ changes to frameworks for existing deliverable types, eg: European standards (EN), technical reports (TR), technical specifications (TS)…

Why is it important?

Demand from TCs

Growing segment

Benefits for society

Potential EC funding

Testing ground for a new business model & processes

Keep standards relevant for users

Project timeline

Original charter approved

Updated charter approved

Framework in place

2017 2018 2019 2020 **2021** **2022** 2023

Technical Solutions

Derek Roche | SESKO (Finland) | Technical Solutions workstream leader

The context & plan so far

▶ Repositories & tools:
  ▶ Leverage existing tools
  ▶ Cloud hosting → flexibility
  ▶ Central CEN-CENELEC account

▶ Metadata & discovery:
  ▶ Search via existing member websites
  ▶ Link to repository (reference, not copy)

Options being considered

Pilot repositories

- ▶ GitHub

- ▶ GitLab

Pilot communication tools

- ▶ Slack

Questions for you (Zoom polls)

▶ Do you have experience with open-source development environments?

▶ What repository would you like to use?

▶ How detailed should metadata be defined for the pilot project findings to be meaningful?

▶ Do you prefer cloud or on-premise repositories?

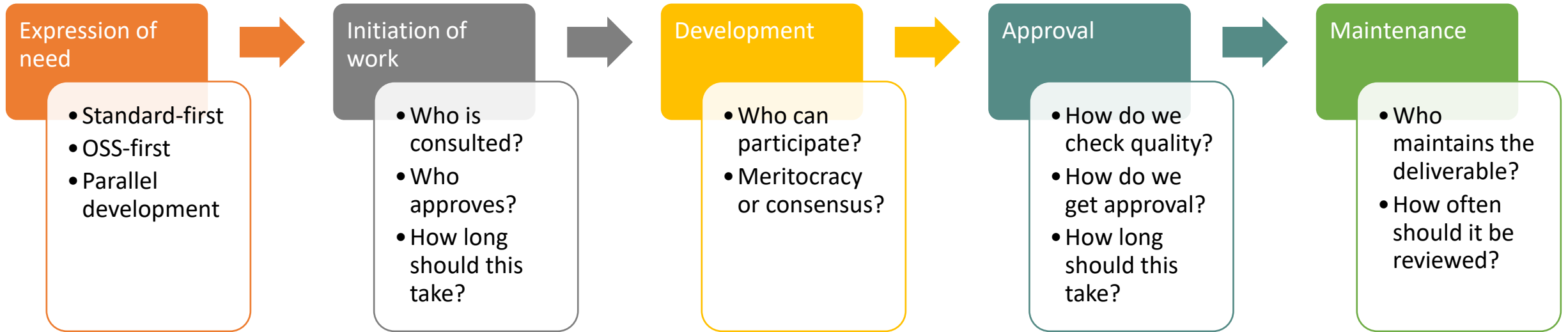11 October 2021
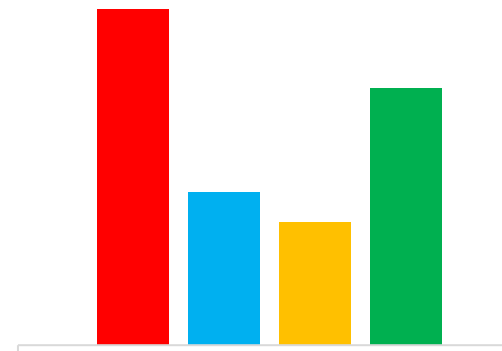
Processes

Camille Cloître | AFNOR (France) | Operationalization workstream leader

The context

Key questions:

Expression of need
- Standard-first
- OSS-first
- Parallel development

Initiation of work
- Who is consulted?
- Who approves?
- How long should this take?

Development
- Who can participate?
- Meritocracy or consensus?

Approval
- How do we check quality?
- How do we get approval?
- How long should this take?

Maintenance
- Who maintains the deliverable?
- How often should it be reviewed?

What is the CEN-CLC standards process?

Structure

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              ┌──────────────────┐
              │ Technical        │
              │ Board (BT)       │
              └────────┬─────────┘
    ┌──────────────────┤
┌───┴──────────┐       │
│ Technical    │       │
│ Committee    │       │
│ (TC)         │       │
└──────────────┘       │
  ┌────────────┬───────┼───────────────┐
┌─┴──────────┐ ┌───────┴──────┐ ┌──────┴───────┐
│ Working    │ │ Working      │ │ Working      │
│ group (WG) │ │ group (WG)   │ │ group (WG)   │
└────────────┘ └───────┬──────┘ └──────────────┘
                 ┌──────┴──────────┐
            ┌────┴────────────┐
            │ Standards       │
            │ (EN/TR/TS/CWA)  │
            └─────────────────┘
            ┌─────────────────┐
            │ Standards       │
            │ (EN/TR/TS/CWA)  │
            └─────────────────┘
```

Stages of developing a Standard (EN)
3 years

- New Work Item
- Working Draft — 8-16 weeks
- Enquiry vote (public comment) — 8/12 weeks
- Comment resolution
- Formal vote (final draft) — 8 weeks
- Publication
- Systematic Review — 5 years
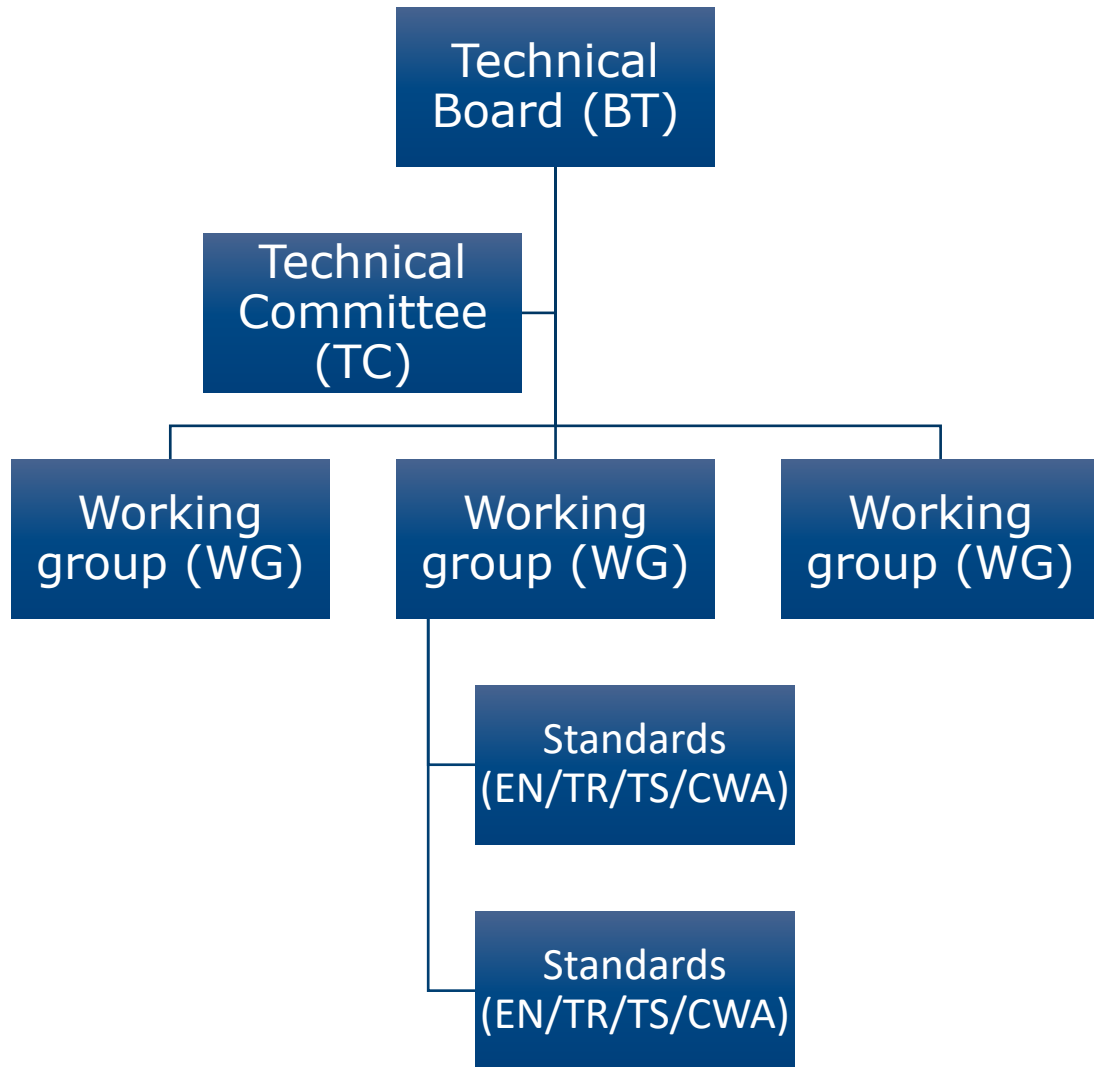
What is the CEN-CLC standards process?

Stages of standards development (CWA)   6-12 months

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┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│                  │     │ Proposal         │     │                  │     │ Kick off meeting │
│                  │     │ submitted to     │     │ Open commenting  │     │ and development  │
│ CWA initiated    │ ──▶ │ technical        │ ──▶ │ period           │ ──▶ │ in the WG        │
│                  │     │ bodies, sector   │     │ (mandatory)      │     │                  │
│                  │     │ fora, and BT     │     │ 4 weeks          │     │                  │
│                  │     │ 8-14 weeks       │     │                  │     │                  │
└──────────────────┘     └──────────────────┘     └──────────────────┘     └──────────────────┘
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- CWA initiated
- Proposal submitted to technical bodies, sector fora, and BT — 8-14 weeks
- Open commenting period (mandatory) — 4 weeks
- Kick off meeting and development in the WG
- Open commenting period (voluntary) — 4-8 weeks
- Publication
- CWA may be used as a base document for an EN

Question for you

▶ What process stage do you think is most crucial for success?
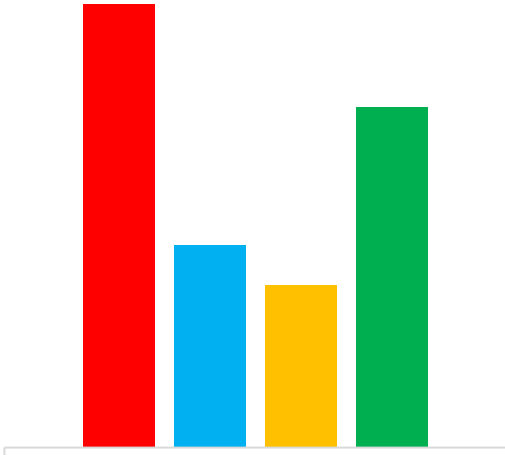
Participation and Funding

Jasnam Channe| BSI (UK) | Business Model Workstream Member

The Context – Participation

▶ Explore the possible incentives and motivation for people from Open Source communities like you to participate within standardization.

▶ Investigate how Standardization can benefit from the skills, tools and Agile development processes from your Open Source Communities via joint participation on CEN-CLC Open Source Solutions.

The Context – Funding

Standards Community Funding Model 💵

Income/Cost Types: Membership fees (NSBs, Companion Standardization Bodies, Affiliates, Liaisons & Partners), EC/EFTA revenue funding.

NSB: Income differs per stakeholder and region. E.g. % membership fees, sales of publications, state funding, certifications.

Open Source Community Funding Model 💵

Open Source does not mean free in terms of money. OS Communities have costs to manage such as infrastructure, tools (CI/Compliance/Quality), staff (Program/Marketing/IT/IP etc.), Events, Websites. Foundations fund these costs via tiered Corporate Memberships & Events hosting.

How can these extra costs for the OSS project be offset against new potential incomes for both OS Communities and CEN-CLC members? How can we avoid impacting negatively on existing revenue models?

Questions for you (Zoom poll)

▶ Have you ever participated in any CEN-CLC EN/TR/TS/CWA project team?

▶ Do you have any knowledge of CEN-CLC existing processes and policies?

▶ Whose platform would you prefer to participate in: CEN-CENELEC or an Open Source Foundation?

▶ Do you see yourself as a developer collaborating with Standards makers from CEN-CLC EN/TR/TS/CWA teams on OS Solutions?

    ▶ Why or why not?
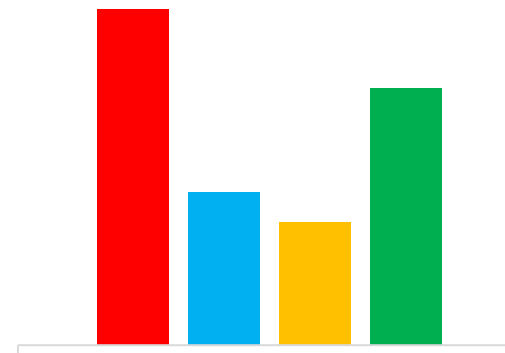
Questions for you (Open discussion)

▶ What are pain points of the collaboration between OS and Standardization? What are the potential incentives?

- What you feel would be a successful outcome?
- Any recommended resources?

Questions for you (Zoom poll)

▶ How do you feel Open Source Solutions incorporated with CEN-CLC Standardization would impact on your current funding model?

▶ Would you contribute financially &/or with your time to a Standardization project at CEN-CENELEC for which results will be shared under a free/open license?
(eg: reference implementations)
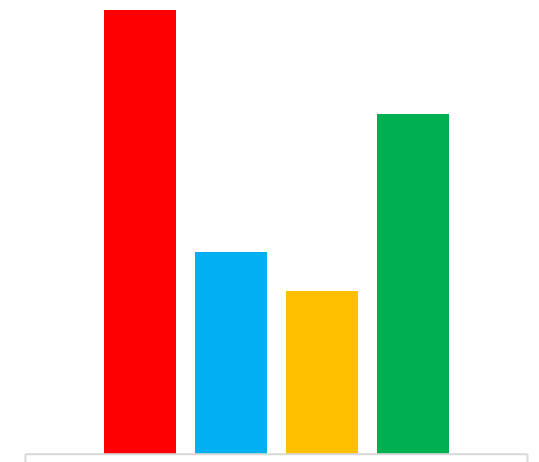
Licensing and IPR

Adrian O'Sullivan | NSAI (Ireland) | Business model workstream leader

The context & plan so far

Challenge : Accommodate the IPR & Licensing Policies used by Open Source Communities, following the Open Source Definition, while also preserving the core principles of CEN-CLC IPR policies

Licensing:

▶ Shortlist of recommended licences

▶ Identify conflicts with existing Policies

IPR:

▶ Investigate if a CLA- Contributor License Agreement required?

What is the CEN-CLC standards process?

Copyright, exploitation rights and other IPR

▶ CEN and CENELEC are funded primarily by the subscriptions of its Members (National Standards Bodies).

▶ Copyright is exclusive to CEN-CENELEC.

▶ Copyright may be shared with other organizations (such as ISO, IEC and ETSI) on the basis of bilateral agreements that may be concluded with these organizations.

▶ Any party participating in the work of CEN-CENELEC is requested to draw attention to any known patent, or pending patent application, that may be considered essential for the publication.

▶ The patent holders declare their willingness/unwillingness to license the patents using the CEN-CENELEC Declaration Form.

Options being considered

Licensing – currently examining:

▶ Apache 2.0

▶ MIT

▶ GNU GPL 2.0

▶ BSD 2.0 or 3.0

▶ European Union Public Licence 1.2

▶ List of licences endorsed by FSF and OSI

Funding – currently considering:

▶ Sponsorship, eg: EC

▶ Pay to participate, like CWAs

▶ Exploring how open source communities generate revenue
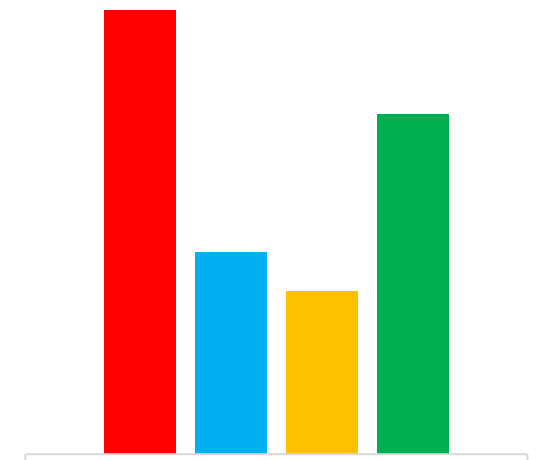
Questions for you (Zoom poll)

▶ Would you be willing to sign a CLA (Contribution License Agreement)?

▶ Would you be willing to assign Copyright of your OSS Contributions to CEN-CLC?

▶ How do you feel CEN-CENELEC's existing IP Policies may impact your ability to participate?
  ▶ Why?
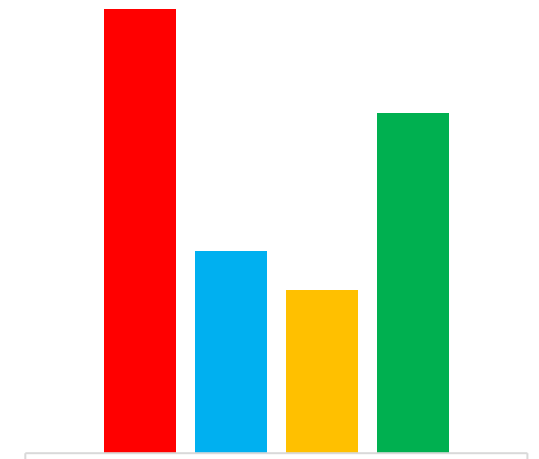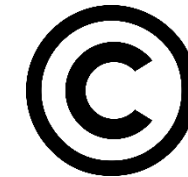
Questions for you (Zoom poll)

▶ What OSI License Types do you think are most compatible with the CEN-CENELEC standardization system current IPR rules?

▶ Which of the following is your favourite OSI licence?

Questions for you (open discussion)

▶ How do you see Open Source Solutions fitting in with the IPR rules within your existing Standardization activities within CEN-CLC?

Next steps

Amanda Saunders | BSI (UK) | Workshop host

Other upcoming sessions

Date & Time	Target Audience	Topics
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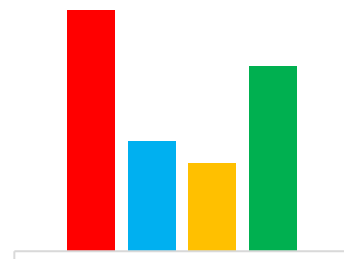
Other activities

Are there 2 or 3 volunteers to represent **standards makers** at the Stakeholder Dialogue Forum on 27 October from 2 to 5pm CET?

Does anyone want to join the project team?

Do you want to be on the mailing list?

(Zoom poll)

Are there any additional activities we should plan?

(open discussion)

Any pilot project ideas? Expressions of interest via our website:

https://experts.cen.eu/key-initiatives/open-source-solutions/ or

https://experts.cenelec.eu/key-initiatives/open-source-solutions/

Any other questions etc? Email oss@cencenelec.eu