

802 LMSC Workshop Follow-Up Hybrid Meeting Technology ~~Complaints~~ Improvement Opportunities

Jason Potterf (Cisco)

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ec-25-0178-00-LMSC

Agenda

- Straw Poll Challenges
- Meeting Attendee Experience
- Meeting Platform Hardware

STRAW POLL CHALLENGES

Straw Poll Challenges

Background

- Cisco / WebEx acquired Slido and removed WebEx Poll
- Slido requires a per-user license to use Slido with > 100 participants
 - WG/TG WebEx meetings that are scheduled by one person not in attendance cannot reliably use Slido for straw polls

Straw Poll Challenges

The collage illustrates various components of the Slido platform used for straw poll challenges:

- Active Poll Interface:** Shows a poll titled "Which of these technology trends are you most excited about?" with four options: Self-driving cars, Mobile payments, Machine learning, and Smart homes, all at 0%.
- Mobile App View:** A smartphone screen displaying the same poll with radio button options and a "Send" button.
- Analytics Dashboard:** A web interface showing real-time statistics for the current room:

Metric	Value
Active users	216
Engagement score	1987
Engagement per user	72
Questions	113
Likes / dislikes	427 / 13
Anonymous rate	72%
Poll votes	1443
Polls created	13
Votes per poll	84

It also lists popular questions and topics, including a word cloud with terms like "communication", "growth", "skills", and "market".
- Download Exports Menu:** A sidebar menu for downloading data:

Export Type	Format
Event summary report	PDF
Questions	XLS
Replies	XLS
Poll results	PDF, XLS
Poll results per user	XLS
- Event Join Card:** A blue card with the Slido logo, the text "Join at slido.com #S421", and a QR code.

Straw Poll Challenges

Paths Forward

1. Issue IEEE SA WebEx accounts to all WG/TG chairs
 - Gives each chair access to Slido
 - Enables more advanced straw poll interactions
 - Removes dependency on volunteers' meeting platforms
 - Allows IEEE SA to manage platform settings consistently
 - No cost to 802 – provided by IEEE SA
 - Participants do not require an account, uses per-session shared credentials / QR codes or WebEx meeting integration


Straw Poll Challenges

IEEE SA
STANDARDS
ASSOCIATION

IEEE 802.3
Ethernet Working Group

IEEE 802.3 July closing plenary meeting - Registration Fee Required

Welcome, Jason Potterf



Your vote is anonymous and no one can see how you vote.

Motion #20

Vote for one

0 of 1 selected.


☐ Yes


☐ No


☐ Abstain


Submit

Return to Menu

 Privacy Policy

 Support

 Leave Meeting

POWERED BY 

Straw Poll Challenges

Paths Forward

2. Use Direct Vote Live

- Single platform for all voting
- Straw Poll voter list taken from registration system at hybrid meetings
- Straw Poll list does not interfere with working group voter list
- Requires all straw poll participants to have an IEEE account

Google Form Straw Poll

Straw Poll # 42

Straw Poll for IEEE 802 Meeting

[Iniciar sesión en Google](#) para guardar lo que llevas hecho. [Más información](#)

* Indica que la pregunta es obligatoria

Do you support straw polls? *

☐ Yes

☐ No

☐ Abstain

Full Name *

Tu respuesta

Affiliation *

Tu respuesta

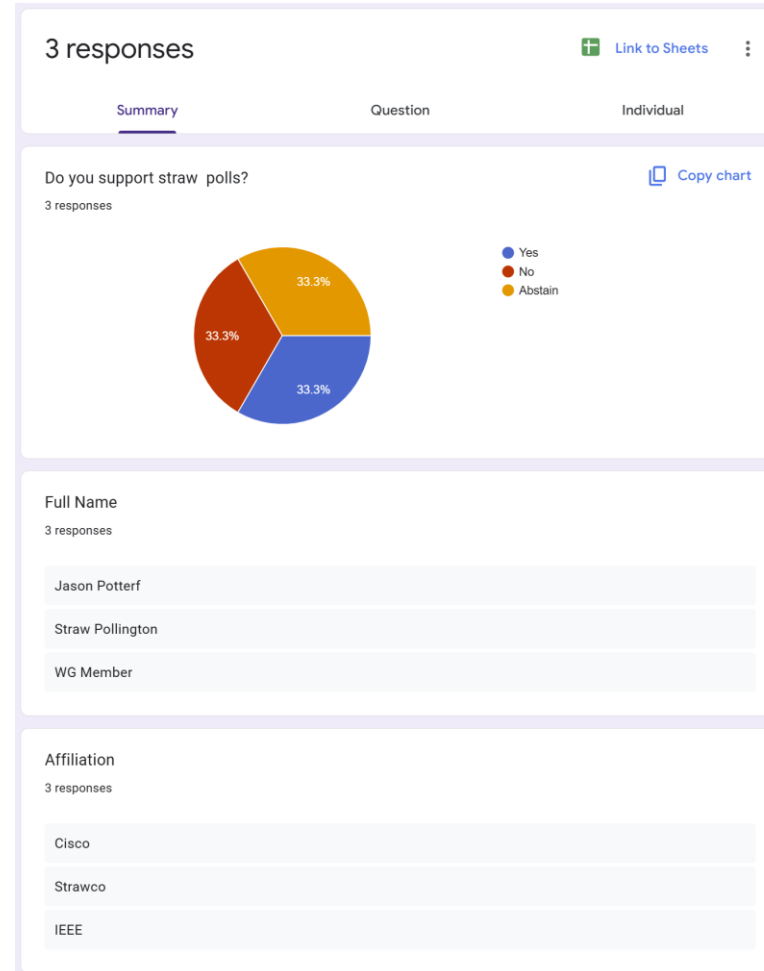
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Google Formularios



Untitled form (Responses) [Saved to Drive](#)

File Edit View Insert Format Data Tools Extensions Help

Q Menus 100% \$ % .0 .00 123 Roboto 10

Timestamp	Do you support straw polls?	Full Name	Affiliation
7/31/2025 17:53:23	Yes	Jason Potterf	Cisco
7/31/2025 17:54:14	No	Straw Pollington	Strawco
7/31/2025 17:54:37	Abstain	WG Member	IEEE

Straw Poll Challenges

Paths Forward

3. Use Google Forms / Sheets

- Available for free to all IEEE members via IEEE Google Account
- Voters can self-report their name and affiliation in the form
- Results data stored in IEEE Google Account and may be shared/protected easily
- Requires post-processing to avoid improper voting as votes are anonymous by default

MEETING ATTENDEE EXPERIENCE

Meeting Attendee Experience

Group	Meeting Platform	Straw Poll Tool	Queue Management	Room Hardware Solution
802 LMSC	WebEx	None	WebEx Chat	Member Laptop
802.1	WebEx	Direct Vote Live	WebEx Chat	WG Laptop
802.3	WebEx/Zoom	Slido / Zoom Poll	WebEx Chat / Hands	WG Laptop
802.11	WebEx	Slido / Chat	WebEx Chat	Member Laptop
802.15	WebEx	Slido / Chat	WebEx Chat	Headless PC
802.18	WebEx	N/A	WebEx Chat	Chair's Laptop
802.19	WebEx	Slido / Chat	WebEx Chat	Chair's Laptop
802.24	WebEx	N/A	WebEx Chat	Chair's Laptop

Meeting Attendee Experience

Concerns

- In-Room attendees join with audio and cause feedback
- Chair requires multiple monitors to manage virtual meeting, monitor queue, etc.
- Attendees must rename themselves on joining to declare affiliation and methods vary across meeting tools
- Queue management is largely manual and uses the chat

Meeting Attendee Experience

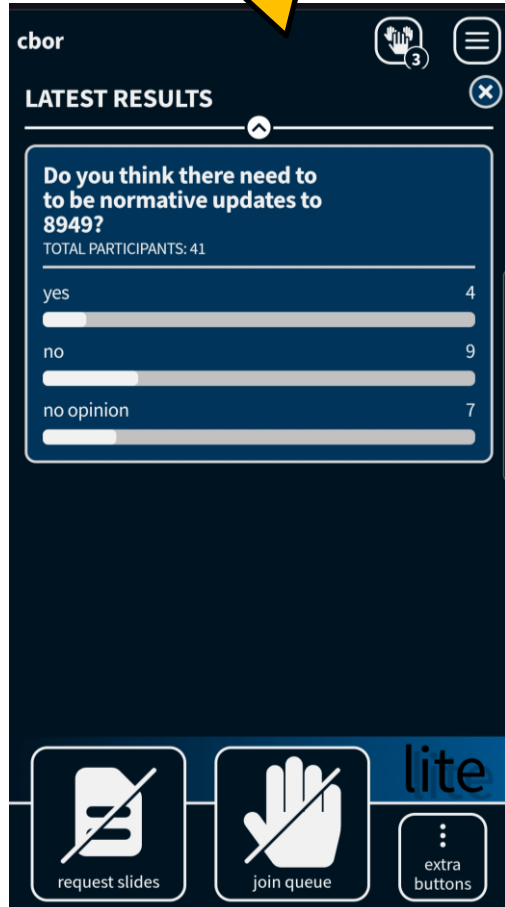
Paths Forward

- Request IEEE SA to issue a sufficient number of meeting platform accounts to address any gaps in capabilities
- Work with IEEE and LMSC/WG leaders to improve default configurations for meeting platforms
- Consider establishing a “best practice” guide to encourage consistent user experiences across meetings

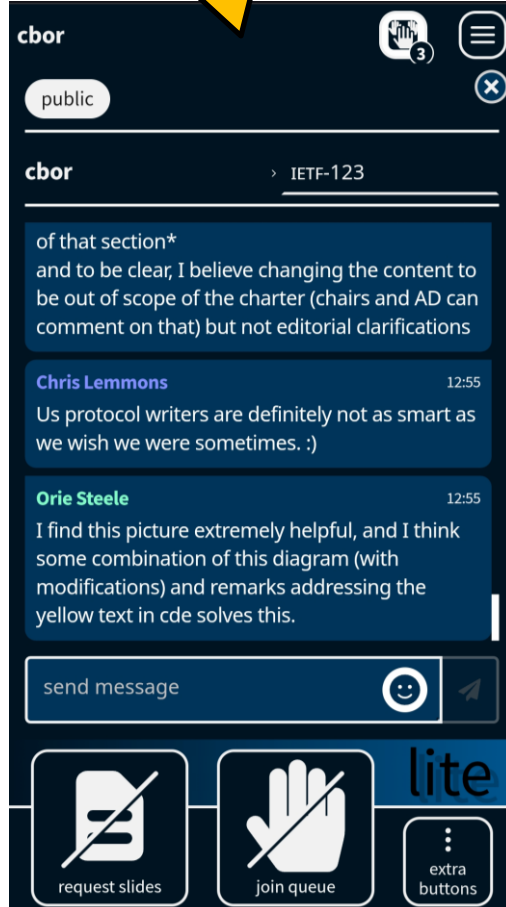
IETF EXAMPLE - MEETECH

In-Room Tool - Phone

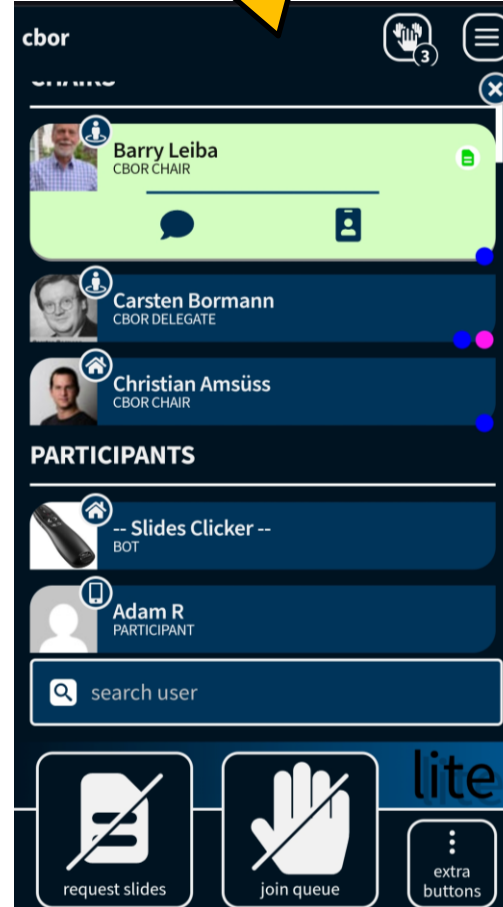
Straw Poll



Chat



Participants



Attendance



Chat

In-Room Tool - Tablet

Audio Subtitles

The interface is divided into three main sections:

- Chat (Left Panel):**
 - Header: "public" (with a close icon) and "mls" (with a right arrow and "IETF-123").
 - Messages:
 - Richard Barnes** (15:39): "... and now it's back"
 - Robert Moskowitz** (15:39): "And the carriers are yelling about costs. All that LDAP? work we had for EU aviation is going really slowly as the carriers are fighting back on the cost for only flying over EU."
 - Rohan Mahy** (15:42): "@Richard Barnes did you want to say anything at the mic about leafoperationintents? I can read it out"
 - Robert Moskowitz** (15:42): "@Richard, probably an ionosphere event. Ionosphere messes up a lot of"
 - Input: "send message" with a smiley face icon and a send arrow.
- Presentation (Center Panel):**
 - Header: Icons for chat, bar chart, book, "mls", edit, "cc", and a group of 61 people.
 - Content: "Open questions"
 - Naming?
 - Do we need an extension for intents, or is a ProposalType enough?
 - Updates, too, or only SelfRemoves?
 - Do we want an IANA registry for intent types?
 - Footer: "-- Slides Clicker --" and "Page 11 of 11".
 - Below the presentation: "-- Slides Clicker -- (slides)" with a remote control icon.
- Queue (Right Panel):**
 - Header: "Queue" (with a close icon).
 - Icons: Hand icon (3), person icon (1), person icon (2), person icon (3).
 - Names: Samir Menon, Sean Turner, Rohan Mahy.
- Audio Subtitles (Far Right Panel):**
 - Header: "Audio Subtitles" (with a close icon).
 - Size buttons: Small, Normal (selected), Large, Largest.
 - Text:

saying hey i want to be removed
 Clients can, like, unilaterally update their leaf
 right, using just an empty commit
 And so they could just add this extension
 and then go offline and delete everything
 right but if you're offline at the moment
 you want to delete, then how do you create the commit? You have to have the up
 -to-date group state to do that yeah but
 but i guess if you issue the intent it's the same, right? the intent has to also
 get to the DSM somehow, right? It has
 - Footer: Refresh and share icons.

At the bottom right, the word "lite" is displayed.

In-Room Hardware



Remote Attendance Tool

REC avtcore

00:06:32

CC

34

RoQ and Interop Tests

Client \ Server	mengelbart/roq	bbc/gst-roq	Lorenzo
mengelbart/roq	1,2,3,4,5,6		2,4,6 *
bbc/gst-roq		1,2,3,4,5,6 ?	
Lorenzo	1,3,5 *		1,2,3,4,5,6

1. C-S Datagrams

2. S-C Datagrams

3. C-S Single RTP packet per stream

4. S-C Single RTP packet per stream

5. C-S Multiple RTP packets per stream

6. S-C Multiple RTP packets per stream

*: QUIC interop issue after key update

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speaker camera

mic1 camera

CHAIRS

Bernard Aboba

AVTCORE CHAIR

Jonathan Lennox

AVTCORE CHAIR

PARTICIPANTS

Alan Frindell

ZULIP USER

Altanai

PARTICIPANT

Colin Perkins

ZULIP USER

Cullen Jennings

PARTICIPANT

Daniel Fay

PARTICIPANT

Daniel Petrie

PARTICIPANT

Daniel Petrie

ZULIP USER

Dominique Hazaël-Mass...

PARTICIPANT

search user

8/1/2025

ec-25-0178-00-LMSC

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Final Thoughts on Meetecho

Thoughts

- Video / recording features are against IEEE policy
- Previous Meetecho discussions were around a pricey, all-inclusive service, but includes features we don't need
- 802 LMSC could consider a reduced complexity solution

Paths Forward

- Jason to contact IETF IT team to get more background on their solution and feasibility of adapting it to IEEE 802

MEETING PLATFORM HARDWARE

Meeting Platform Hardware Requirements

Mandatory

- User Friendly for Chairs
- Feature / Security Upgrades must be manageable by service provider unless automatic and quickly applied
- Ethernet support for Internet
- IEEE official meeting platform(s) support

Desired

- Direct HDMI input to share content in room without Internet delay
- HDMI output for projector(s) and confidence monitor
- Balanced audio input and output
- No external mouse/keyboard required
- Minimal “dongles” for connections
- Support non-IEEE meeting platforms

Meeting Platform Hardware

Laptops

- Higher cost, theft target
- Provides built-in display and keyboard/track pad
- Requires OS updates / patching, requires management automation to scale up
- Unfamiliar OS (Linux) or not your favorite OS (MacOS for Windows users, or vice versa) can cause meeting disruptions

Meeting Platform Hardware

Compute Bricks

- Raspberry Pi / Chrome Box / NUC
- Medium cost, medium theft risk
- OS familiarity an issue for chairs
- Keyboard and mouse are separate
- Dais monitor must be external or omitted
- Meeting platform OS support is typically second-class

Meeting Platform Hardware

Dedicated Hardware

- High cost, but low theft risk
- Provides best user experience
- Allows HDMI input to share slides / applications with no latency
- High quality audio processing
- Dais monitor must be external or omitted
- Often tied to a subset of meeting platforms

Meeting Platform Hardware

Shipping / Import / Export

- Laptops have highly restrictive import/export rules
- Dedicated meeting AV hardware is a bit easier
- 802.3 using LineSpeed to handle logistics this meeting

Meeting Platform Hardware

Paths Forward

- Nov 2025 LMSC Workshop AI 5.02 (Gilb) covers finding service provider to manage meeting room hardware
- Suggest using the requirements in this presentation to guide evaluation of service provider offerings