

Second Consultation on Remote Rooms for IETF Meetings

CONTENTS

Background.....	1
Definitions.....	1
How a Remote Room works.....	2
Alternatives not included in this experiment.....	2
Objectives.....	3
Use cases.....	4
The IETF 125 Shenzhen experiment.....	4
What we've heard.....	5
Request for feedback.....	9

Background

This is a request for community feedback following the Remote Rooms experiment which took place during IETF 125 in Shenzhen, China in March 2026. .

The specification for Remote Rooms was developed with input gathered through community consultation^{1 2} and following an open call for interest, a single Remote Hub was supported that operated in Tokyo, Japan with three simultaneous Remote Rooms hosting approximately 30 participants.

While engagement and satisfaction among participants who used the Remote Rooms was high, the experiment highlighted technical challenges and significant resource requirements for both organizers and IETF staff that require consideration for possible future editions. It also raised concerns about effects on the IETF meeting experience.

Definitions

Remote Hub: The physical location of one or more Remote Rooms.

Remote Room: The physical set up, including A/V systems and devices, and shared computer used to join the Meetecho Room. It may vary from a shared (dedicated) laptop to a full-room video conferencing suite. It also includes the room, table, chairs and screens.

¹ <https://mailarchive.ietf.org/arch/msg/ietf-announce/gExw5DMWqv4YHrXWciwRBRZpgT8/>

² <https://mailarchive.ietf.org/arch/msg/admin-discuss/93zPB6WL20wurTdr-J0eKeosA2g/>

Remote Hub Organizer: The individual(s) responsible for organizing the Remote Hub (including arranging the Meetecho Rooms) and supporting participants in their use of it. They are responsible for determining which sessions a Remote Room will be used for, and may organize other items like food and beverage.

Remote Room Participants: The individuals physically in the Remote Hub for a session using a Meetecho Room while also connected individually to that session on their own devices via Meetecho.

Meetecho Room: The special Meetecho connection and interface used by the Remote Room.

How a Remote Room works

A Remote Hub is not an official IETF-hosted venue, it is a privately run venue that the IETF supports by providing access to a special feature in Meetecho that enables an experience very close to the overflow room experience that is occasionally used onsite at IETF Meetings.

Participants, selected by the Remote Hub organizer, gather in a Remote Room with suitable Audio/Video (A/V) support; the organiser logs into a Meetecho Room using a dedicated computer and chooses the session to join; the participants all login to Meetecho on their personal devices using a special QR code specifically for that Meetecho Room.

Participants use Meetecho to join the queue, chat, etc. When a participant in a Remote Room is called to speak, the A/V feed switches to the feed from the Remote Room and the participant speaks using the shared A/V facilities in that Remote Room. This is a seamless switchover where the technology is transparent, not a distraction and not another complicated thing for session chairs to manage.

Alternatives not included in this experiment

The alternative option included in the initial community consultation was that of solely providing a feed of the IETF meeting that can be shown on a large screen in a remote location, mirroring the main screen in the onsite session.

In that alternative, all participants sign-in to Meetecho as remote participants and use their personal devices for interaction. If a participant wants to speak, they must mute the large screen and speak using their personal device as would any normal remote participant. This alternative experience reduces the cost and complexity of the proposed Remote Rooms feature but also makes the chances of disruption from incorrect use of the technology more likely.

Another alternative, of an official remote IETF venue open to any IETF participant, was not considered or consulted on as that would be a significant change to the way the IETF works.

The option of insisting that any Remote Hub organizer allow any IETF participant to use the Remote Hub was rejected as no Remote Hub organizer would be able to agree to that.

Objectives

The primary objectives of the experiment were to:

- **Test shared presence:** Evaluate the Meetecho Remote Room configurations for group participation:
 - test the technology - usability, performance, reliability and correctness
 - assess interactions - between the meeting room and the Remote Room and between remote participants and the Remote Room
 - understand the experience of those in the meeting room and those participating through the Remote Rooms experience or remotely on their own
- **Assess the Remote Rooms logistics:** Evaluate specification requirements:
 - selection of Remote Room participants
 - necessary space and furniture
 - food and beverages provided
 - mandatory testing session
 - dedicated A/V suite (or equivalent) that includes a shared camera, screen, microphone and speakers to match the expected number of Hub participants
 - scheduling considerations
 - participant support, including
 - links to Meetecho documentation
 - connecting individually for each session
 - management of behaviour in the room
 - management of technology in the room
 - feedback session
- **Measure operational impact:** Assess:
 - workload for IETF LLC staff
 - costs to IETF
 - workload of Remote Room organizers
 - costs to Remote Room organizers

- **Inform future offerings:** Gather data to determine whether and how Remote Rooms should be offered in future meetings.

Use cases

A variety of use cases for Remote Hubs have been proposed to provide opportunities to participate in IETF meetings remotely while sitting with other people.

- **Academic:** Students studying in IETF-relevant areas, who are unable to participate onsite as a group due to the cost could participate together in an IETF meeting with their peers under the supervision of their professor.
- **Programs:** There are a number of third-party programs bringing new participants into the IETF who are unable to participate onsite as a group due the cost, but could participate together with their peers under the guidance of the program coordinators, possibly supported by experienced IETF participants.
- **Regional:** IETF participants in a specific region who are unable to travel due to cost or visa issues could gather as a group to participate in an IETF meeting together with their peers under the guidance of an experienced IETF participant.
- **Alternative:** IETF participants who are unable or unwilling to travel to a specific IETF meeting could gather as a group to participate in an IETF meeting together with their peers.
- **Interim:** Interactive experience for interim meetings - both with a main meeting location and one or more Remote Hubs, or without a main meeting location and using multiple Remote Hub locations.

The IETF 125 Shenzhen experiment

Prior to IETF 125 Shenzhen, three expressions of interest in organizing a Remote Hub were received. Two were not suitable candidates for Remote Hubs and a single Remote Hub was approved as an experiment based in Tokyo, Japan, which worked as follows:

- **Facilities and Attendance:** Three meeting rooms were used to offer sessions to roughly 30 participants at a single Remote Hub. Each participant at the Remote Hub was required to register for the IETF meeting as a remote participant.
- **Costs and Fees:** Costs for developing the program, Meetecho functionality, technical testing, set-up and operational costs were absorbed by IETF and no fee was charged to the Remote Hub organizers.

- **Terms and Conditions:** The Remote Hub Organizers were required to accept specific terms and conditions relating to the running of the Remote Rooms.
- **Logistical Costs:** All local Remote Hub logistics, other than those absorbed by IETF, were arranged and paid for by the Remote Hub organizer (including security, signage, badging, meeting space, AV equipment, food and beverages and personnel on site). These costs were significantly higher than initially anticipated due to the need for additional security measures to provide for non-company participants to be accommodated at the facility.
- **Attendance and Joining the Meeting Session:** Organizers were responsible for the process of inviting and deciding who would attend the Remote Hub. Special links were provided to organizers to connect specific Meetecho Rooms to meeting sessions. Individual participants in each Remote Room were then intended to use special links (displayed as QR codes in the Remote Room) to connect to the sessions using the Meetecho "onsite tool" on mobile devices, while utilizing the Hub's room-based audio and video system. In practice, many participants in Remote Rooms used their laptops to join the sessions.
- **Audio Visual Testing, Set-up and Use:** Remote Hub organizers were responsible for details of technical set up for the Remote Rooms. The Remote Rooms experience enables various forms of Remote Rooms: from a small group sitting around a laptop to a dedicated video conferencing suite. Given the room sizes proposed by the Remote Hub organizer and the number of anticipated participants, the Remote Rooms were expected to provide a room-scale audio and video experience. Several test sessions to provide a baseline confidence in and familiarity with the Remote Room features were conducted successfully in advance of the meeting. A full test was not conducted because of difficulties in arranging access to the Remote Hub facilities. In the end, while the room playback audio and screens worked sufficiently, room-wide microphones were not available. The result was that participants in the Remote Rooms had to stand up and walk to the microphone on the front of the web camera to speak in the session.
- **Sessions Covered:** Sessions joined in the Remote Rooms were determined in advance through participant voting following issuance of the preliminary agenda.

What we've heard

We have received feedback from the community, the organizers of the Remote Hub and participants who attended IETF125 through the Remote Hub.

Culture:

HEARD FROM THE COMMUNITY

- Remote Hubs will change the culture of IETF because the hallway conversations are such an important part of the meeting
- The use of Remote Hubs may lead to fragmentation of the community along financial, regional or subject matter lines, or cliques of people with similar views forming their own private communities
- Remote Hubs should be open to all interested participants and not private
- The appearance of a Remote Room at the start of the Plenary made it appear to be an official overflow room and to have higher standing than individual remote participants, which it shouldn't

HEARD FROM THE REMOTE HUB PARTICIPANTS

- 95% agreed or somewhat agreed that in hindsight, they would make the same decision to attend the Remote Hub - the rest were neutral
- 95% said that they would probably or definitely attend another Remote Hub meeting if they were not attending the IETF meeting in person for non-budget reasons - the rest were unsure

HEARD FROM THE REMOTE HUB ORGANIZERS

- Multiple people later expressed regret at not hearing about the event and wished they had been invited, rather than attending remotely from their home.
- Participants socialized between sessions in the small public area
- Participants left during the lunch break to find food elsewhere in Tokyo (there were many very near-by restaurants)
- Some social dinners were planned and attended by participants

Finance:

HEARD FROM THE COMMUNITY

- The IETF LLC absorbing its costs appears to be subsidization of large corporations
- The level of costs and logistics required favors large corporations with the resources to operate a Remote Hub
- It may be difficult for organizers of a Remote Hub to justify the cost internally, particularly if the Hub includes participants from outside the organizing company
- The use of Remote Hubs during an IETF meetings may negatively impact meeting Host perceptions of the value of hosting an IETF meeting

- A second version of the main location with arrangements for separate spaces corresponding to working group sessions run in parallel would be far more expensive than the options discussed

HEARD FROM THE REMOTE HUB PARTICIPANTS

- 11% would have attended the meeting in Shenzhen if they had not attended at the Hub
- 22% would have not registered or attended at all if not at the Hub
- 63% would have attended remotely

HEARD FROM THE REMOTE HUB ORGANIZERS

- If the same model is used in the future, additional IETF LLC support may be necessary to manage audio quality at remote locations
- The effort and costs involved in organizing the Remote Hub were significant

Productivity:

HEARD FROM THE COMMUNITY

- Participants may question attending the meeting in person if the working group chair or a large portion of the working group is at a Remote Hub
- There is a significant benefit for participants to operate in the same time zone as the IETF meeting even if the Remote Hub is not in the meeting time zone

HEARD FROM THE REMOTE HUB PARTICIPANTS

- 53% said the Remote Hub meeting was somewhat less productive than attending the IETF meeting in person
- 42% said productivity was about the same or more productive than attending the IETF meeting in person
- Having a community of like minded participants appeared to have some value, but less than a gathering of all the IETF
- What worked well:
 - Focused side conversations
 - Multiple concurrent rooms
 - Time zone proximity
 - The ability to socialize with other participants
 - Special Slack channel for Remote Hub participants

- Ability to present with others present in person rather than remotely alone
- Critical mass of people at the Hub
- Focus on broadly aligned topics

HEARD FROM THE REMOTE HUB ORGANIZERS

- Remote Hub participants invited from a limited number of IETF areas to:
 - Control the volume of responses to comply with corporate safety and security requirements - each invitee needed to be vouched for by a known reference to eliminate the risk of non-IETFers trying to get into Japan or into the corporate offices
 - Avoid a wide dispersion of participants which would increase conflicts for limited Remote Room sessions
 - Maximize potential for productive conversations
- Many Remote Hub participants who were attending or chairing a session which was joined in a Remote Room participated directly through the Meetecho Room
- Remote Room participants who were attending or chairing a session which was not joined through the Meetecho Room were encouraged to leave the premises to participate in these sessions due to a lack of space at the facility
- Remote Hub organizers committed to operating the Remote Rooms for the entire IETF day
- There were times where attendees were sitting in a Remote Room session but were listening to a different session over Meetecho on their laptop - this was expected and people understood and accepted the limitations of only having 3 Remote Rooms

Logistics:

HEARD FROM THE COMMUNITY

- Remote Hub should have been openly available to all community members
- A second version of the main location with arrangements for separate spaces corresponding to working group sessions run in parallel could possibly be accommodated at a university

HEARD FROM THE REMOTE ROOM PARTICIPANTS

- Set-up seemed similar to the IETF mic line and therefore familiar
- Helpful to have the ability to express preference on sessions to be connected to in advance

- Hub rooms were close together which was helpful
- Ability to come and go as we pleased - important
- Hub well located with many meal options around
- Challenges:
 - Lack of space outside of Remote Rooms
 - Meetecho AV set-up could use further improvement
 - Having to scan the QR code to join the meeting in a Remote Room with a phone and then copy the URL to a laptop
 - Lack of access to beverages and snacks
 - Challenges with corporate security and the need to be escorted

HEARD FROM THE REMOTE ROOM ORGANIZERS

- Preferable to have coffee and snacks in the vicinity of the Remote Hub
- In-room microphone support would have been preferable
- Meetecho audio levels varied greatly across the remote mics, and occasionally organizers would need to sit at the Remote Room-connected computers to adjust microphones up and down depending on who was speaking - chair mics were low and others varied, particularly remote participant mics
- Public list of people signed-up to attend the Remote Hub was valuable
- Overall the event ran very smoothly

Request for feedback

Feedback is sought from the community on the following questions, the answers to which will be used to inform whether and how Remote Rooms may be offered during future IETF meetings.

Please respond to the questions below by 27 September 2026 either privately to the IETF LLC Board and the Executive Director at llc-feedback@ietf.org or to the public administrative discussion list admin-discuss@ietf.org.

Question 1: In principle, do you think that Remote Rooms/Remote Hubs similar to those described above should be available for IETF meetings and/or Interim meetings?

Question 1a: If so then should there be any restrictions on how they are used, or who can use them?

Question 2: How, if at all, do you see the use of Remote Rooms/Remote Hubs for IETF meetings, similar to those described above, impacting the IETF?

Question 3: Should anything change in the way Remote Hubs/Remote Rooms work?

Question 4: Should the IETF LLC support either of the alternatives discussed above and under what conditions?

Question 4a: If so, then is that in addition to or in place of the Remote Rooms/Remote Hubs described above?

ENDS