Town Hall at IGF23



Interoperability and the Multi-stakeholder Model

October 11, 2023, Kyoto

IAB and IESG members here today



Mirja Kühlewind IAB Chair ietf@kuehlewind.net



Colin Perkins
IRTF Chair
csp@csperkins.org



Mallory Knodel
IAB Member
mknodel@cdt.org

The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.

RFC 3935



IAB and IESG members remote



Lars Eggert
IETF chair
lars@eggert.org



Andrew Alston
Routing AD
andrew-ietf@liquid.tech



Dhruv Dhody
IAB Member
dd@dhruvdhody.com



Suresh Krishnan IAB member ietf@sureshk.com

The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.

RFC 3935







Everyone may participate



Make all work available for free



Judge contributions on technical merits



Determine success by voluntary deployment

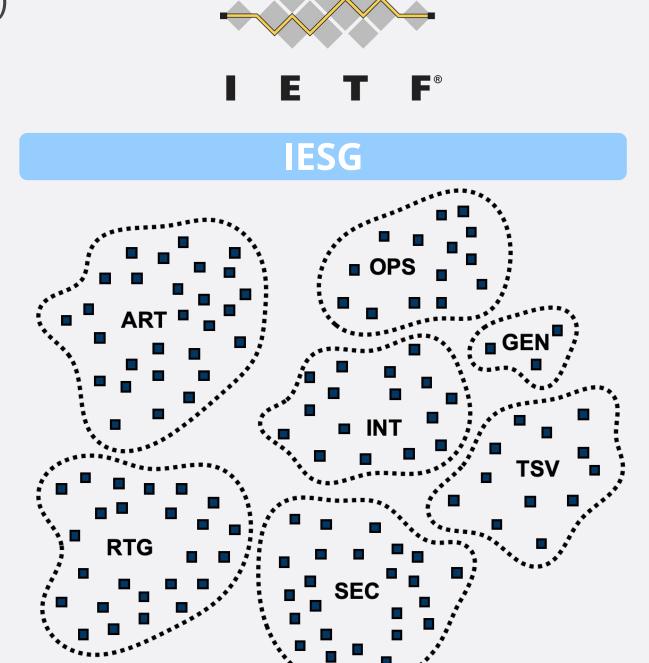


IETF and IRTF

leadership

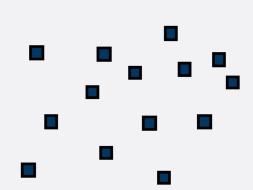
I A B

- Internet Engineering Steering Group (IESG)
 - Approves all Internet Standards
 - Starts/Manages/ends technical WGs
- Internet Architecture Board (IAB)
 - Architectural oversight
 - Liaison management
- Internet Research Task Force (IRTF)
 - Longer term Internet research





IRSG





IETF by the numbers

- Currently active working groups: 130
 - 8 new groups chartered in 2022
- Nearly 10,000 RFCs published
 - 194 published in 2022
 - 811 Internet-Draft submitted in 2022

More than 6000 participants*

*based on unique email address used to register for IETF event, submit drafts, or post on email lists

- 3294 active individuals sending 104013
 messages on mailing lists in 2022
- Up to 1700 participants per meeting
 - Around 1000 on-site participants
 - 500-700 remote participants
 - Around 400 Hackathon participants
- From more than 100 companies
- From 27 countries

https://www.arkko.com/tools/allstats/d-countrydistr.html



IETF

Work Areas and Key Protocols

Internet Applications

(W3C, OASIS, etc.)

Operations & Management (OPS)

network management & operational best practices

> YANG NETCONF SNMP RADIUS

Applications & Realtime Media (ART)

application protocols over end-to-end transports HTTP, voice & video, SIP, RTP, email

Transport (TSV)

end-to-end transmission mechanisms over network paths TCP, UDP, QUIC, congestion control

Routing (RTG)

stable paths across dynamically interconnected networks BGP, OSPF, IS-IS, MPLS, RSVP, VPNs, SFC, multicast

Internet (INT)

how to carry IP packets over different link layers IPv6, IPv4, DNS, DHCP, NTP, mobility, multihoming

Security (SEC)

security & privacy at all layers & for all protocols

TLS
IPsec
PGP
S/MIME
PKIX
cryptography

Link Layers

(IEEE, 3GPP, etc.)



IAB current topics of interest (extract)

- Sustainability and Environmental Impact of Internet Technology
 - Environmental Impacts of Internet Technology (e-impact) program
 - IAB workshop on Environmental Impact of Internet Applications and Systems
- Risks of Fragmentation and Centralization
- Censorship and Internet connectivity
- Naming Systems and Identity Management
- Privacy and Security
 - o <u>draft-iab-privacy-partitioning-02</u>: Partitioning as an Architecture for Privacy
 - IAB workshop on Management Techniques in Encrypted Networks (M-TEN)
- Regulation and Internet Governance



IETF

Openness and process safeguards

- Openness is the basis for innovation in and on top of the Internet and key to its success.
 - All IETF standards are available online at no charge, thus facilitating adoption of them.
 - This enables devices, services, and applications to interoperate across a interconnected,
 heterogeneous, and global network of networks
 - The IETF determines its success by technical quality and voluntary deployment
- The IETF process is open, transparent, and relies on a bottom-up consensus-building
 - Everybody may participate, no membership, three plenary meetings a year with full remote participation
 - All work like Internet-Drafts and email archives are publicly available
 - Decisions are based on rough consensus, no voting, leadership judges consensus
 - Leadership leadership is selected by community and based on diversity norms



thank you.