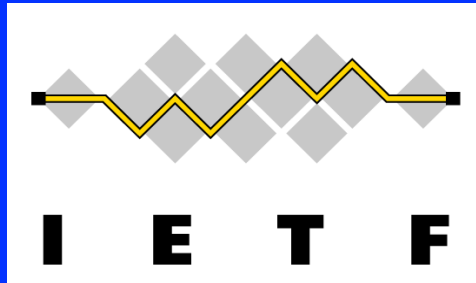# *The Internet Engineering Task Force (IETF) Stuff*

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What is the IETF?

◆ since 1986, Internet standards R us

◆ does not exist, **no** members, **no** voting

◆ "*rough consensus & running code*"

◆ 1,200 to 2K at 3/year meetings, *N*K on mail lists
   1679 & 1350 last 2 meetings, last mtg: Vienna in July

◆ 131 working groups (where the stuff happens)

◆ 8 areas (for organizational convenience) with ADs
   APS, GEN, INT, O&M, RTG, SEC, SUB, TSV

◆ management: **IESG** (ADs, chosen by community)

◆ architectural guidance & liaisons: **IAB**

◆ produces **standards** (defined as such by use)

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What is the IETF?, contd.

◆ IETF documents - all open
◆ Internet-Drafts
- **anyone** can submit - expire in 6 months
- **some** I-Ds are working group documents
◆ RFCs (stands for "RFC")
- archival publications (never changed once published)
- different types: (**not all RFCs are standards!**)
  - informational, experimental, BCP, standards track, historic
◆ 3-step standards track
- Proposed Standard, Draft Standard, Internet Standard
◆ interoperability not conformance

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Hot Areas

◆ IP telephony
- SIP, RTP, enum, megaco/H.248, spirits, rohc, sigtran, etc
◆ QoS
- nsis (old work includes diffserv, RSVP, intserv)
◆ storage
- ips (iSCSI, FCIP), NFSv4, RDDP
◆ SUB-IP
- MPLS, GMPLS, IPO, TE, VPNs, L2 over IP/MPLS
◆ base Internet protocols
- IPv6, TCP enhancements, SCTP, DCCP, RMT, mobile IP

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Hot Areas, contd.

- ◆ Internet emergency use
- ◆ location-based technology
- ◆ security
  - IPSec, secure email, etc
- ◆ routing
  - BGP update, IS-IS, routing futures, multicast
- ◆ management
  - SNMPv3, XML-based, policy-based
- ◆ applications
  - LDAP, iCal, IM, FAX, email, webdav

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Hott(er) Areas

- ◆ reorganize IETF
  - funding IETF
- ◆ bumps in the net
  - middleboxes (e.g., NATs & firewalls)
  - should the IETF admit that they exist?
- ◆ "legal intercept"
  - see RFC 2804, but also see 9/11
- ◆ regulator interaction
  - e.g., enum, IPv6, service definitions, QoS, protecting incumbents, "protecting" citizens from whatever

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IPR

- ◆ IETF IPR rules in RFC 2026 Section 10
- ◆ currently working on clarifying these rules
    in ipr working group
- ◆ current IETF rules
    require disclosure of all of own IPR in
        own submissions
        submissions of others
- ◆ WG takes IPR into account when choosing technology
- ◆ push from open source people for RF-only process
    consensus to not change to RF-only
- ◆ the Todd factor

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"Problem" WG

- ◆ complaints a year ago
    "late surprises," one AD can block, too slow (e.g. wait for security)
- ◆ formed "problem" working group
    created Internet Draft
    found 8 problem areas
    no agreed to IETF "mission", poor engineering practices, hard to deal with large problems, stds track too long, too much work for IETF to do, management structure not up to task, reaching closure in WG, people not prepared for roles

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But No Solutions WG?

◆ general sense at plenary

  1/ there are problems that need to be fixed

  2/ sense that the is no consensus on how to proceed

  no to: pick one person, tell the IESG to fix things, tell the IAB to fix things, pick a small group, form a working group

◆ so right now people are proposing things to solutions list

  including me

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Rule Creation

◆ Q: how do rules get made?

◆ A: randomly

  RFC 2026 is a guide, greybeards are a resource

  but in the end it has been the IESG making up things as needed

◆ 2026 was not random: poised WG

◆ now IETF is trying to figure out how to change for the future

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Players

◆ Q: who are the players?

meritocracy+

"management" selected by nomcom

clues (and knowledge of history) not required

not as much vendor vs. vendor as I expected

some 'wise ol' folk' with a history of clue

primary force: document editors

self/WG chair selected

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Motivation

◆ Q: why does it matter to them?

◆ A: for most: company pays

for others (including me): ask Freud

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Example Conflict

◆ Internet Emergency Preparedness WG
◆ significant disconnect between parties
  - regulators: must have way to prioritize emergency traffic
  - ISPs: no need in backbone, can not have problem that this will fix
  - regulators: any place, any time
  - enterprises: you are not coming in here!
  - regulators: only "official" emergency workers
  - ISPs: also need to support emergency communications for customers
◆ regulators may determine outcome :-(
  - ITU-T is helping

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Summary

◆ for something that does not exist the IETF has quite an impact
◆ but treading on others' turf
  - and IETF's turf being tread upon
◆ rather big money
  - even post-bubble
◆ but future foggy

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