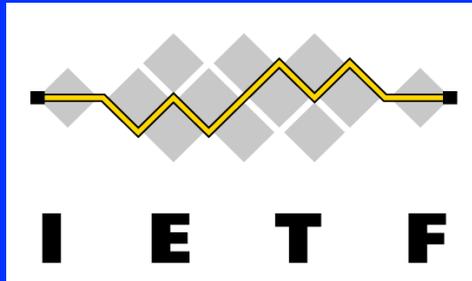


# *The Internet Engineering Task Force (IETF)*



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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, **NK** on mail lists  
1,570 & 1679 last 2 meetings, next mtg: Vienna in July
- ◆ 132 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)

## What is the IETF?, contd.

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- ◆ 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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## Stats

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- ◆ 301 RFCs published since Jan 2001
- ◆ 145 Standards Track
- ◆ 17 Best Current Practice
- ◆ 80 documents approved & in RFC Editor queue

## Hot Areas

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- ◆ 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.

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- ◆ 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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## IPR

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- ◆ 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

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## E.G., IEPREP

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- ◆ 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

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## The Network?

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- ◆ what is “The Network”?
- ◆ earlier talk referred to “The Network”
- ◆ but getting fuzzier as to what that is
  - POTS
  - cellular
  - Internet
  - enterprise IP networks

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## IETF Technologies in the World

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- ◆ Internet runs on IETF technologies
- ◆ not to pick on anyone but...
- ◆ talk this AM - listed lots of IETF technologies
  - MPLS, RSVP, etc
- ◆ but did not list IETF (later mention verbally)
- ◆ general issue: use of / extensions to SDO technology by another SDO
  - not just an IETF problem - but an IETF problem

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## Ways to “Work”

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- ◆ megaco/H.248
  - common text IETF/ITU-T - just too much fun
- ◆ RFC 3429 - MPLS OAM
  - let ITU-T develop their own in an area that the IETF is not interested (or disagree)
- ◆ RFC 3427 “Change Process for the Session Initiation Protocol (SIP)”
  - says ‘SIP is an IETF protocol, changes should be by IETF’
  - drafts of same process for MPLS & RSVP
- ◆ IS-IS
  - agreement with JTC1 to split standards effort

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## Finding out What is Going ON

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- ◆ important to know when new work is contemplated
  - to ensure communication before things get frozen
- ◆ IETF sends proposals for new WGs & WG changes to SDO mailing list
  - asking for comments
  - get few comments

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