

# The IETF

- What it is
- A rough guide to how it works

For more info see:  
<http://www.ietf.org>

Gorry Fairhurst  
gorry@erg.abdn.ac.uk  
(c) 2001

# Communications Standards Bodies



**ISO**

**ITU**

ITU-T

ITU-R

ICGSAT...

**ETSI**

BSM

TIPHON ...

**TIA**

TR34.1, TR34.2, ...

**ISOC (IETF)**

**IEEE**

**DVB**

**Forum activities**

DAVIC, ATMF, ESA RSAT, ATVEF

UMTSF, 3GPP, FSAN,

IPv6F, IPMI, ISMA, ...

# ETSI Work Items

## **ETSI Technical Committees (TC)**

- HF - Human Factors
- SEC - Security
- SES - Satellite Earth Stations & Systems
- SPAN - Services & Protocols for Advanced Networks
- TMN - Telecommunications Management for Networks

## **ETSI Projects (EP)**

- BRAN - Broadband Radio Access Network
- ERM - Electromagnetic compatibility
- TIPHON - Telecom. & IP Harmonisation Over Networks
- UMTS - Mobile (3GPP)

Around 800 ETSI members (> 50 countries)  
Voting restricted to members



# DVB Work Items



Created 1993

Based on ISO MPEG-2 Standard

**Commercial Module (CM)** defines the technical work  
**Technical Module (TM)**

DVB-IPI - DVB service architecture over IP networks

DVB-GBS - Generic Broadcast and Service Information

DVB-AVC- Additional Audio Video content

DVB-WIN - Wireless in Home Networks

Standards published through ETSI

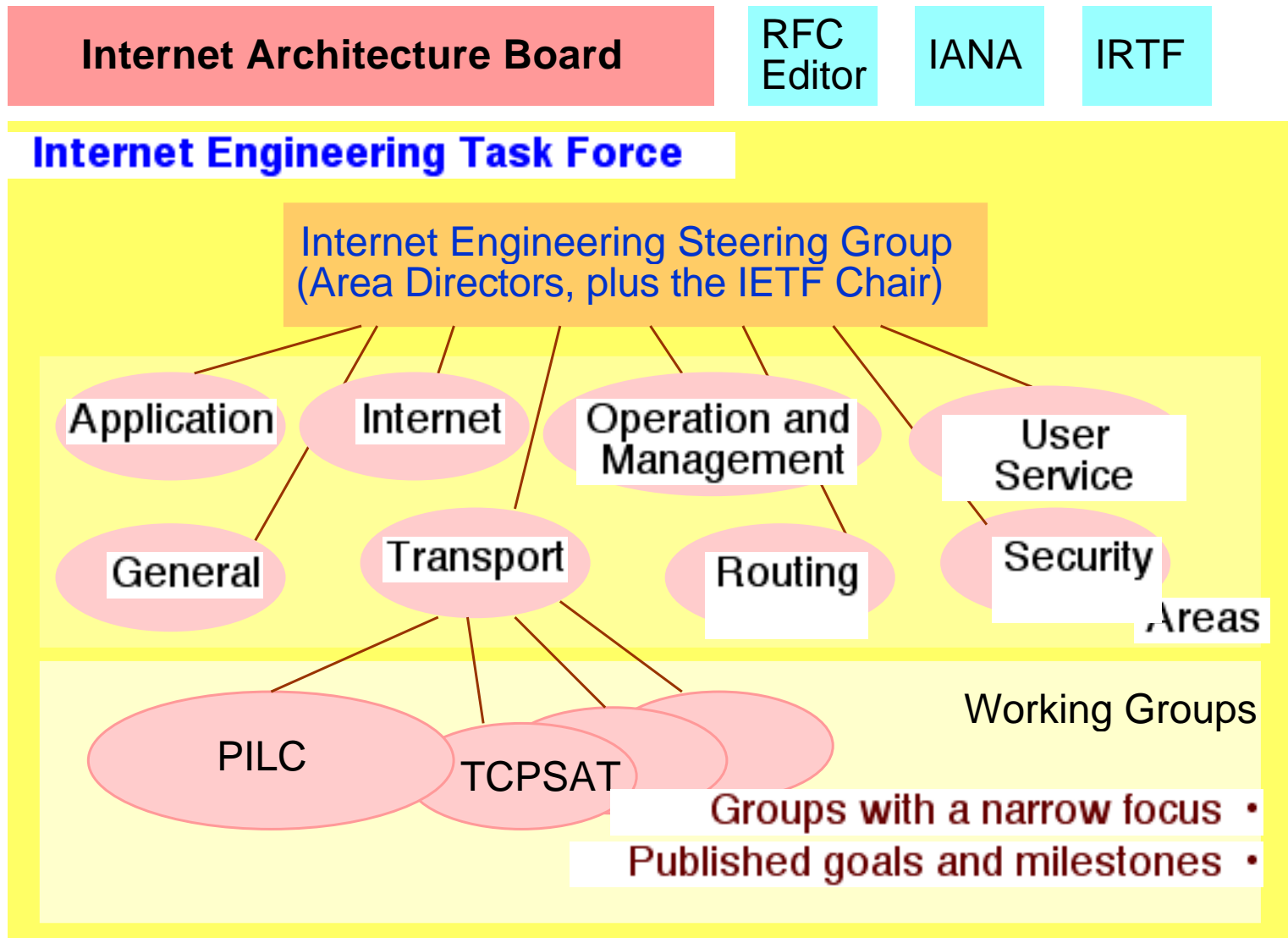
Voting restricted to members

Gorry Fairhurst, © 2001

University of Aberdeen, UK



# Internet Engineering Task Force



# IETF Working Groups



## Some Satellite WGs

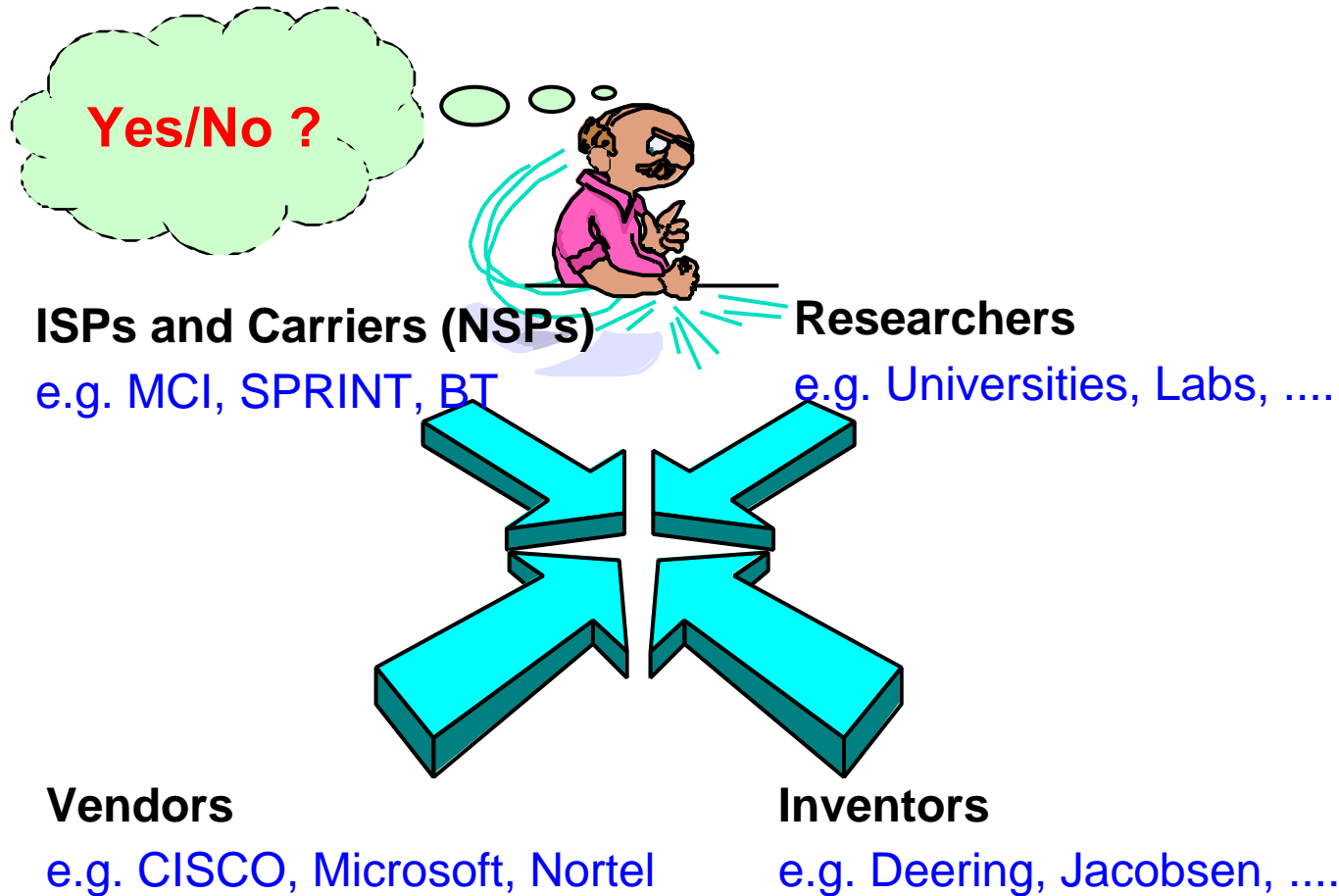
PILC (link / subnetwork)  
UDLR (Asymmetry) (recharter)  
TCPSAT (done)

## Many Other WGs...

IPSEC (security)  
AVT (multimedia)  
ISSL (QoS)  
ROHC (compression)  
IDMR (mcast)  
RMT / IRTF RMRG (mcast)  
msec / IRTF SMuG (mcast)  
IPNG, ngtrans (IPv6)

*Each WG must have well defined aims (Charter)*

# Who forms the IETF?



*Only INDIVIDUALS, no company representatives.*

# Internet Documents



## Internet Drafts (IDs)

Working documents (work in progress)  
Individual submissions  
Working group drafts

## Requests For Comments (RFCs)

Informational  
Best Current Practices (BCP)  
Experimental  
Standards Track  
    Propose Standard  
    Draft Standard  
    Standard  
Historic

RFC 2026



# Examples of recent work

## Work to be completed by 2002

PIM-SM; MSDP; PIM-SSM ; MBGP

IDMR: IGMPv3 - now last call

PILC : - at last call

## Ongoing work, beyond 2002

MAGMA (IGMP related issues) - Proxy+Snooping

MBoneD; BGMP (IPv6); MALLOC

RTP SSM/ARQ; RMT

Zeroconf - Plug and Play

IPCDN - IP over Cable Data Networks

IPFC - IP over Fibre Channel

UDLR - Uni Directional Link Routing

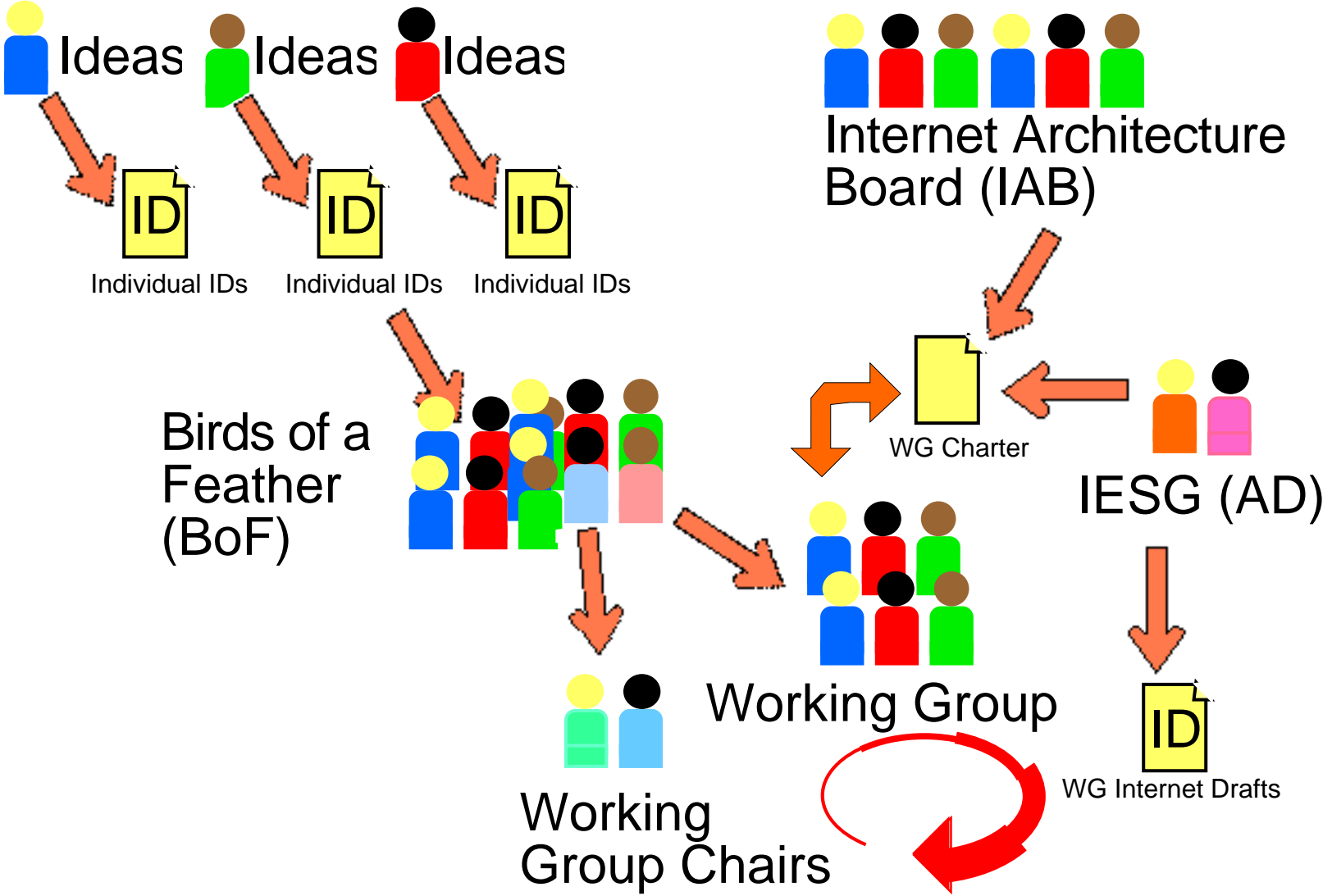
IPv6 ; MLDv2 - IP next generation

TCP, DCP - Transport Protocols



*Old WGs go dormant or disband, new ones start*

# Forming an IETF Working Group



# IETF Working Groups



## **WG charter**

- Lists what WG does
- Lists what it should not do
- Lists RFCs which are to be written
- Has well-defined milestones

## **WG consists of:**

- 1 or 2 Area Directors
- Usually 2 co-chairs
- Authors / editors of the IDs
- One or more advisors
- A lot of people on an email list

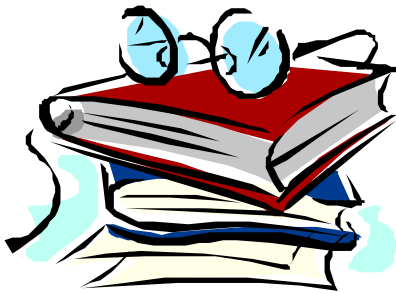
*The work is done via the email*  
*3 times a year the WG can meet at the IETF meeting*

# *Internet Engineering Task Force*

The IETF works on the basis of:

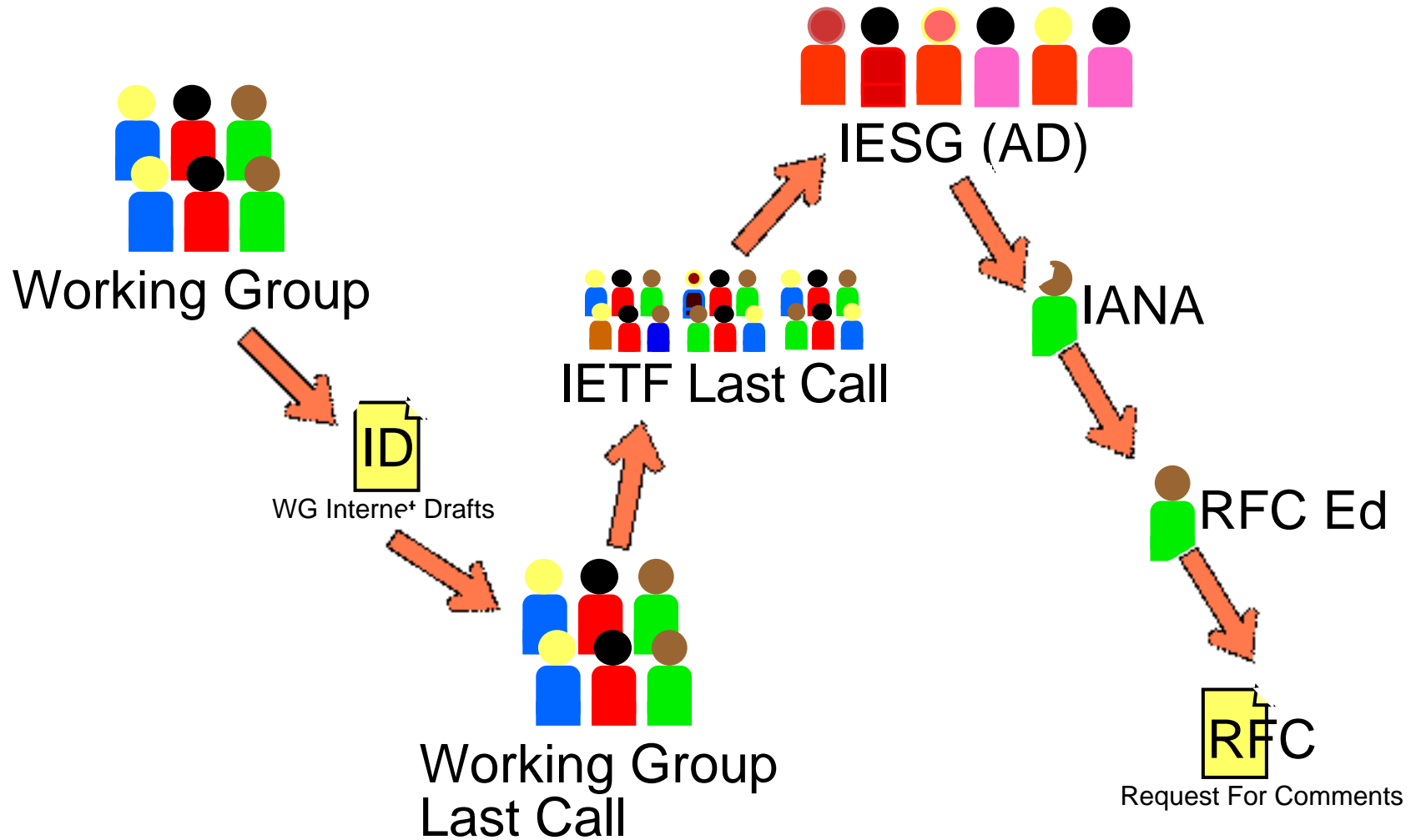
*“Rough consensus  
and running Code”*

David Clarke, MIT



There is NO voting

# Developing an RFC



# IETF Meetings

## 3 Meetings a year

Next in Salt Lake City, Utah, USA

Open to all to attend

It is NOT a conference

Do allow WG to meet face-to-face

Do provide an update of progress

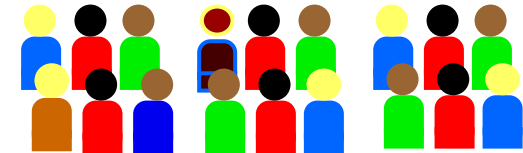
Do provide feedback from IAB, IESG

## But few decisions made at the meeting

Do not vote!

Do not (often) make decisions

Decisions are “taken to the list”



# *Internet Engineering Task Force*

IETF protocols must be *robust*:

*“Be liberal in what you accept  
be conservative in what you send”*

- also a good rule for IETF debates!

