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# Why are there standards?

- Safety
  - e.g. so house doesn't burn down
- Interoperability
  - Encourage markets
- To keep busy bodies away from real work...
- Many are in networked&component businesses

## The "I\*" Organisations

- ISOC Internet Society http:// www.rfceditor.org/overview.html
- IAB Internet Architecture Board
- IESG Internet Engineering Steering Group
- IETF Internet Engineering Task Force
- IRTF Internet Research Task Force
- IANA Internet Assigned Numbers Authority
- RFC Editor
- ICANN Internet Corporation for assigned names and numbers

#### **The Standards Docs**

- RFC != Standard
- Start life as idea
- Go to ietf working group
- If no group, go to Area Dirs (IESG) and ask for one. Requires a charter
- Document idea with I-d can be procedure, protocol, practice or implementation hint
- WG last call, IESG last call
- Can last between 1 and 10 years!
- http://www.rfc-editor.org/overview.html

## In Practice

- Important topics (e.g. MPLS, VOIP, Signaling, IP on Bluetooth/GPRS/3G) require a lot more effort...
- Modest ideas can still proceed rapidly
- Inertia and workload take their toll.
- Industry or Fora pressure still frowned on...
- ...but happens (e.g. Cisco mpls, ETSI megaco©

## Does it work better than?

- Other groups
  - IEEE do ethernet/wifi
  - 3Gpp do cellular phone stuff
  - WWW do web
- National &International Standards
  - -BSI
  - ISO, ITU

# Why would you....?

- Get involved?
  - Time consuming
  - E.g. 3 7 day meetings a year ++
  - Conf calls
  - Expensive
    - Lot of travel/hotel bills
  - Patience
    - Time from idea to working std 20yr+
    - Lots of vested interest and idiots

# Its an important part of the world

But not for every one

Questions

## **Governments and IETF**

- Don't mix well
- C.f. raven/intercept/calea
- Also recent "call" logging
- Also failure to understand global nature (despite governments claims to be all for global markets<sup>©</sup>

# **Operational Internet**

- See NANOG
- See RIPE, etc
- See weak anarchy, but strong tendency towards social good – e.g. multiple roots for DNS frowned on, non congestion avoiding TCP frowned on etc etc etc

## **Summary**

- Internet standards a transparent process
- Internet operations are largely a free market
- Cost of entry to both standards and market are low
- Model adopted by others (E.g. Global Grid Forum)