The IETF World of Standardisation
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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
It's 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😊)
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)