What’s Happening at the IETF & IRTF?
Human Rights Protocol Considerations
and how to get involved

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Disclaimer

Two important points:

No-one really speaks for the IETF or IRTF

I am speaking about the IETF or IRTF as an individual participant

https://trac.tools.ietf.org/group/iesg/trac/wiki/SpeakingForIetf
### IETF Standards make the Internet work

**TCP/IP**

- IPv4 (RFC791) and IPv6 (RFC2460…)
- TCP (RFC675…) and UDP (RFC768)

**E-Mail**

- SMTP (RFC5321), IMAP (RFC3501)

**Network and Routing**

- BGP (RFC4271), OSPF (RFC2178…), MPLS (RFC3031)

**DNS**

- DNS (RFCs 1034, 1035…)
- DNSSEC (RFCs 4033, 4034 & 4035)
- DANE (RFCs 6698, 7671…)

**Web**

- HTTP (RFC2616…)

**Security**

- TLS (RFCs 5246 & 6176)
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<td><strong>Security (SEC)</strong></td>
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<td>- Security protocols and mechanisms, including cryptography</td>
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Internet Research Task Force

— Considers long-term research issues related to the Internet
— IRTF Chair & Research Group Chairs form Internet Research Steering Group (IRSG)
— Publishes RFCs in IRTF Stream
— Current Research Groups:
  - Crypto Forum (CFRG)
  - Thing-to-Thing (T2TRG)
  - Internet Congestion Control (ICCRG)
  - Measurement & Analysis (MAPRG)
  - Network Function Virtualisation (NFVRG)
  - Network Management (NMRG)
  - Information-Centric Networking (ICNRG)
  - Network Coding (NWCRG)
  - Global Access to the Internet for All (GAIA) – Jane Coffin (Chair)
  - Human Rights Protocol Considerations (HRPC)
Participating in IETF & IRTF


— Anyone can participate in the mailing lists and discussions

— Anyone can submit a ‘draft’ document (known as an Internet Draft or I-D)

— Working Groups and Research Groups debate and discuss drafts

— Documents progress through the standards process to become RFCs

— Primary venue for all communication is e-mail
Impact of Internet Protocols on Human Rights

— UN Human Rights Council 2012 – affirms rights defined in Article 19 of Universal Declaration of Human Rights and International Covenant on Civil and Political Rights must be protected online

— UN General Assembly 2013 – calls upon all States to respect the right to privacy in digital communication

— UN Special Rapporteur FoE 2015 - governments should promote use of strong encryption and protect anonymous expression online

— UN Special Rapporteur FoE 2016 – private entities should integrate commitments to freedom of expression into product engineering, policies and standards
— IRTF Human Rights Protocol Considerations Research Group established in Jan 2015
— Researching whether standards and protocols can enable or threaten human rights
— Can the human rights characteristics of the Internet be degraded if not properly defined, described and sufficiently taken into account during protocol development.
— Open, secure and reliable connectivity is essential for rights such as freedom of expression and freedom of association.
RFC 6973: Privacy Considerations for Internet Protocols

— Entry point for this work

— Offers guidance for developing privacy considerations for inclusion in protocol specifications.

— Aims to make designers, implementers, and users of Internet protocols aware of privacy-related design choices.

— Suggests that whether any individual RFC warrants a specific privacy considerations section will depend on the document's content.

— Builds on previous body of security analysis by recognizing the threats to privacy are security threats.
Research into Human Rights Protocol Considerations
draft-irtf-hrpc-research-14

— Informational document with consensus from IRTF HRPC Research Group
— Aims to offers guidelines similar to RFC 6973 (privacy considerations)
— Outlines human rights threats on the Internet
— Consider how well-known Internet protocols (e.g. DNS, NAT and HTTP) can have human rights concerns
— Considers implications of traffic interception, manipulation, throttling, logging, tracking, and DDoS on human rights
Research into Human Rights Protocol Considerations
draft-irtf-hrpc-research-14

— Provides guidelines in 19 areas such as privacy and confidentiality, but also:

– Connectivity: is end-to-end connectivity supported, do protocols support low bandwidth and high latency, can protocols operate in a stateless manner?
– Content agnosticism: is all network traffic delivered in a non-discriminatory way?
– Authenticity: can receiver be sure data comes from the source it claims to come from?
– Internationalisation: are protocols, standards, and implementations usable in different languages and scripts?
– Censorship resistance: do protocols introduce new identifiers that can be associated with persons or content?
– Open standards: are protocol specifications published, and their functioning known?
Other HRPC RG Drafts

— Freedom of Association on the Internet (draft-tenoever-hrpc-association-02)
  - Scope the relationship between Internet protocols and the right to freedom of assembly and association

— On the Politics of Standards (draft-tenoever-hrpc-political-02)
  - Outline different views on the relation between protocols and politics, and whether protocols are political

— Unrequested Communications (draft-tenoever-hrpc-unrequested-00)
  - Addresses issue of unrequested traffic in the form of spam or DDoS attacks
Next Meeting: IETF 100

– 11-17 November 2017, Singapore
  https://www.ietf.org/meeting/100/

– HRPC RG meeting
  Friday 17 Nov 2017 (0900-1130 UTC+8)

– Remote participation available:
  – Audio streams
  – Web conferencing systems
  – Jabber chat rooms
IETF Fellowship Programme

Fellowships available to enable people to attend IETF meetings


![Image of fellowship recipients]
IETF Policy Programme

Fellowships available for regulators to attend IETF meetings and learn about IETF standards and processes

Summary

— The IETF and IRTF makes the Internet work better
— It has a fundamental role in Internet administration
— It has international scope, but local relevance
— It has an open, inclusive and well-established structure
— Your participation is critical to the success
— More information:

http://www.ietf.org/newcomers.html
Thank you.

http://www.internetsociety.org/deploy360/
deploy360@isoc.org