

Coordination with Other Areas

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Different Strokes for Different Folks

- The Security Area wants to keep people's bits safe.
- The Transport Area, for example, wants to get bits through efficiently.
- The two needs sometimes conflict.
- We're the Internet *Engineering* Task Force. We can't *engineer* protocols unless we understand all of the constraints.

Some Problematic Directions

- Many problems arise because of IPsec – packet headers, transport checksums, application payloads are all protected.
- TLS causes some trouble, but generally less.
- NATs – can't change addresses, especially in the payload.
- ECN – copy TOS bits from outer IP header to inner IP header after tunneling.
- TCPSAT – play games with window sizes; spoof ACKs.
- Traffic monitoring folks want to see port numbers.

What Should We Do?

- We can't keep launching denial of service attacks on each other.
- We need more people paying attention to other areas' working groups.
- We need to explore some compromise solutions or new technologies that can satisfy all parties.