Two words on congestion

RTCWEB needs congestion control

- To avoid the Internet Meltdown
- To avoid being blocked at constricted gateways
- To achieve predictability in the presence of other traffic
- To achieve performance when bandwidth isn't unlimited
- To achieve fairness with regard to other traffic

Congestion control requirements

- Don't create a mess!
- Don't impose limits when there's enough bandwidth.
- Share fairly with other users (including other RTCWEB apps)
- Be nice

..... the last one is not easy to engineer for ....

Nonrequirements:
- Exactly TCP behaviour
- ???

The Google rtcweb-congestion draft

- Congestion control for real time media
  - No attempt to marry congestion to reliability
  - Uses delay as primary metric, not packet loss
  - In some sense, this depends on buffers being too large
- Requires no change to existing signalling mechanisms
  - Uses RTP timestamps for timing info
  - Uses TMMBR for feedback
  - Both can be done better if we can change the protocol
- Code is freely available, people can try this out
- Long list of possible further work items

Next Steps

- Identify the requirements
- Identify the tools we can use
- Pick some as our baseline "this is what we do"

Volunteers?