Non-compound RTCP

- Updated to version -03
- What is a non-compound RTCP?
- Is a modification of the bandwidth algorithms needed?
- A few open issues sorted out
  - Encryption/authentication
  - Enforcing regular RTCP
What is a non-compound RTCP?

- Proposal:
  Non-compound RTCP = 1 RTCP packet for each lower layer datagram (UDP)
  - If the size of the first RTCP packet + possible SRTCP overhead is smaller than the UDP packet size it is a compound RTCP.
  - If lower layer datagram contains one RTCP packet -> Non-compound RTCP
  - May cause problem if a middle box wish to determine if an SRTCP is non-compound (is this needed?)

- Other definitions exist (proposed to be removed)
Modification of bandwidth alg. needed?

- An evaluation document can be found at http://www.ijdata.com/rtcp-non-compound-rtcp-evaluation.doc

- Analysis on how non-compound RTCP affects the bandwidth algorithms in RFC3550

- No specific issues found with present algorithms

- No need to modify algorithms
  - Algorithm modifications can improve performance in certain cases...
  - ...but do not (in the general case) give a large enough improvement to justify inclusion in standard.
AVPF Immediate mode

- Feedback using non-compound RTCP is smaller in size.
- Makes it possible to use AVPF immediate mode in a more liberal way.
Enforcing compound RTCP

- Guaranteed as long as RTCP senders follow the AVPF scheduling algorithm defined in Section 3.5 in RFC4585.
- All regular AVPF packets must be transmitted compound.
- Applies for both early and immediate modes.
Encryption/authentication

- RFC3711 states: "SRTCP MUST be given packets according to that requirement in the sense that the first part MUST be a sender report or a receiver report".
  - This is not a problem however as SRTP does not use the encryption prefix in RR/SR.
- Non-compound RTCP affects section 9.1 in RFC3550
  - Header verification must accept that the PT number in the (first) RTCP differ from 200 or 201.
Next steps..

- No serious objections to the draft
- Time for a last call?
  - A cleaned up version needed with stated facts rather than discussion + removal of temporary information.