Negotiated Finite-Field DHE groups

Group Choices

- lowest size: 2048 vs 2432?
- total number: 4 or 5 -- drop 6144?

Indication of Client Support

- range of NamedCurves set aside for FFDHE -- high byte 0x01
- presence of FFDHE value in Supported Groups + FFDHE ciphersuite

Indication of Server non-selection

• decided we don't need indication of server support if the server doesn't choose FFDHE at all.

Indication of Server Selection

either:

- FFDHEKeyExchange instead of ServerKeyExchange
 - signed message is distinct from DHParams
 - (still) not including the rest of the handshake

or:

- use normal ServerKeyExchange
 - larger message (because of inclusion of modulus)
 - simpler to implement
 - still needs to ship public share and signature

Alert Details

- what alert should the client send if the ServerDHParams signature doesn't validate?
- what alert should the client send if dh_Ys <= 1 or dh_Ys >= dh_p 1? (and vice versa for the server about dh_Yc?) (using handshake_failure(40), seems wrong)
- what alert should the client send if it decides to terminate the connection due to receiving a custom group?

Other issues?

• Last Call?