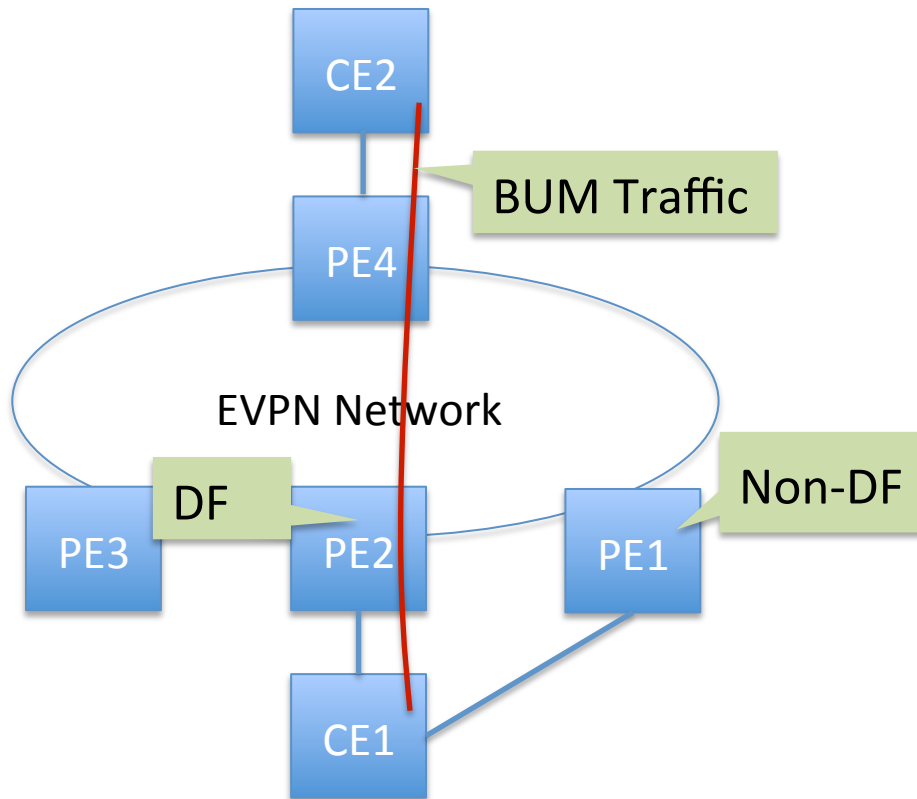

Handshaking mechanism for DF election

draft-hao-bess-evpn-df-00

Weiguo Hao, Lucy Yong, Qiandeng Liang

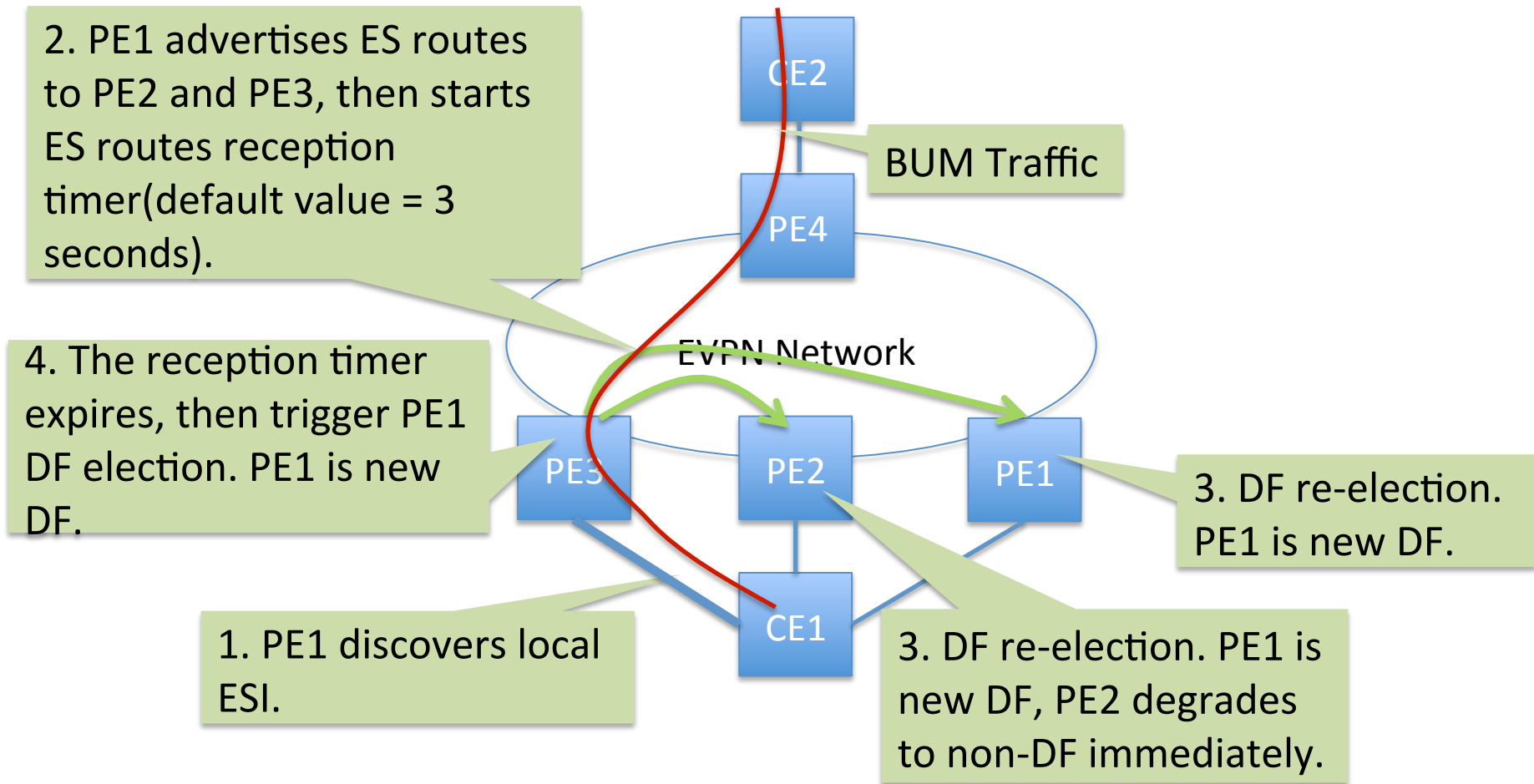
March 2015 Dallas USA

Problem : DF Election between PE1 and PE2



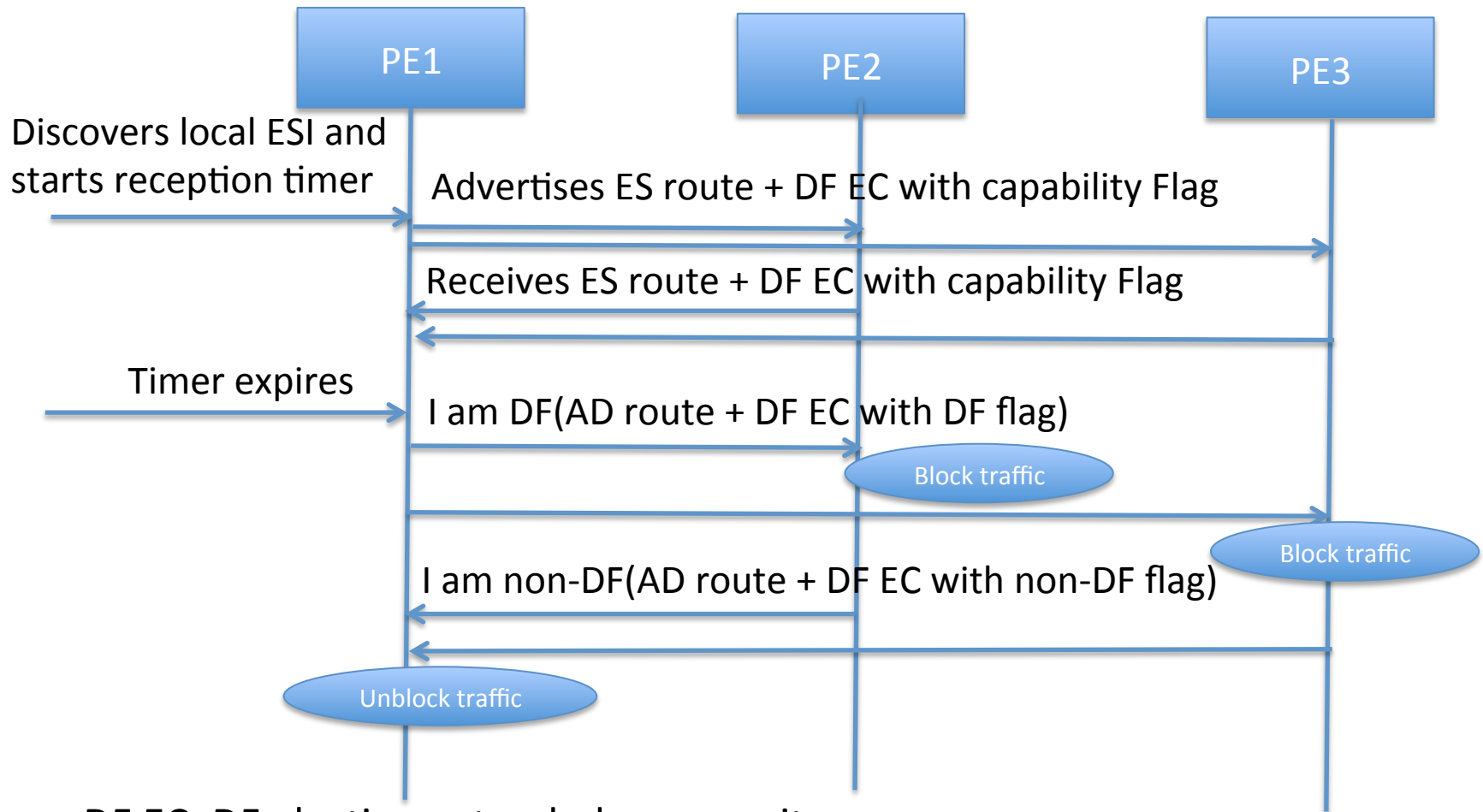
Initially, PE3 doesn't join the ESI connecting to CE1, CE1 only connects to PE1 and PE2 in active-active mode, DF election is running between PE1 and PE2, PE2 is elected as DF and PE1 is non-DF.

Problem(continue) : DF re-election triggered by PE3



Problem: BUM traffic disruption will be incurred by DF re-election, up to reception timer.

Handshaking mechanism for DF election and re-election



DF EC: DF election extended community

DF election extended community

EVPN Extended Community sub-type:
0x03 DF Election

```

 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
| Type=0x06      | Sub-Type=TBD  |C|D|N|          Reserved=0      |
+-+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|                                     sequence                       |
+-+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
                        DF election extended community

```

- o C. DF handshaking capability Flag.
- o D. DF Flag.
- o N. Non-DF Flag.
- o Sequence. The sequence number is used to ensure that PEs connecting to same ESI are negotiating for same DF election.

Next Steps

- Solicit comments and suggestions