# Session ID and Control Code Options for STAMP Message Format

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### Option 1: Variable Length Session ID Part of Existing Sequence Number

```
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
                         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
Session ID / Sequence Number
                                 Sequence Number
Timestamp
                                  Timestamp
Error Estimate
                 Control Code
                            Error Estimate
                                          Control Code
Receive Timestamp
                         MBZ (28 octets)
                           Sender Session ID / Sender Sequence Number
                         Session-Sender Timestamp
                         Session-Sender Error Estimate
                         Ses-Sender TTL
Figure: Sender Message Format in STAMP
                              Figure: Reflector Message Format in STAMP
```

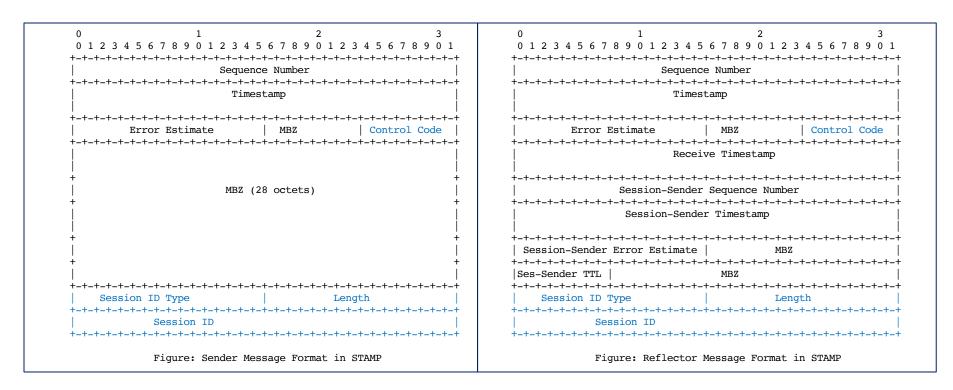
- ✓ Control Code compatible with TWAMP Light message format
- ✓ No change for Session ID in both message formats STAMP and TWAMP Light

#### Option 2: New 24-Bit Session ID Field

```
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
                        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
Sequence Number
                                Sequence Number
Timestamp
                                Timestamp
Control Code
   Error Estimate
                Control Code
                            Error Estimate
Session ID
                                 Receive Timestamp
MBZ (24 octets)
                           Sequence Number
                        Session-Sender Timestamp
                        Session-Sender Error Estimate
                        Session-Sender Session ID
                        |Ses-Sender TTL |
Figure: Sender Message Format in STAMP
                            Figure: Reflector Message Format in STAMP
```

- ✓ Control Code compatible with TWAMP Light message format
- ✓ Session ID is 24-bit which is good

#### Option 3: 32-bit Session ID in TLV



- ✓ Control Code compatible with TWAMP Light message format
- ✓ Session ID is not needed for TWAMP Light, so this option is also fine

#### Option 4: 16-bit Session ID

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 Sequence Number Timestamp Error Estimate Session ID MBZ (28 octets) Control Code Type Control Code Figure: Sender Message Format in STAMP

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 Sequence Number Timestamp Error Estimate Session ID Receive Timestamp Session-Sender Sequence Number Session-Sender Timestamp Session-Sender Error Estimate Ses-Sender TTL Control Code Type Control Code Figure: Reflector Message Format in STAMP

- Control Code NOT compatible with TWAMP Light message format
- ✓ Session ID has only 16-bits
- ✓ Message formats for TWAMP Light and STAMP diverge TWAMP Light also needs Control Code
- This option is least favorable

## Thank you