

9. ULE Extension Formats for DVB-S2

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ULE and GSE can share the same type space

GSE frames >> MPEG-2 TS Packets

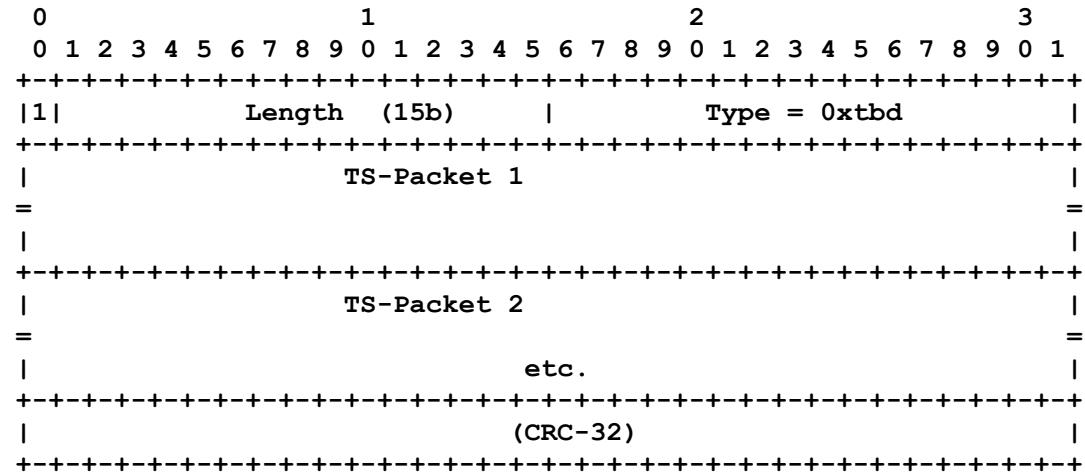
- High link rates
- Small packet overhead a concern

GSE lacks a signaling plane

- Needed for clock timing (NCR)
- Needed for service description (SI)
- Needed for address resolution

Goal define 2 simple extensions to allow this

Format for TS Packets



1 or more MPEG-2 TS Packets

Format for PDU concat

```
 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
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|1|           Length (15b)   | Type = 0xtbd-concat      |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|0|           PDU-Length (15b)|          PDU-Type        |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
=                      PDU-1                     =
|
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|0|           PDU-Length (15b)|          PDU-Type        |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
=                      PDU-2                     =
|
More PDUs as required
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|                           (CRC-32)                   |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

Saves overhead for small PDUs

- any type of PDU
- overhead of MAC address
- processing overhead at high speed